UI

The Interaction of Unemployment Insurance and Social Assistance

by Garry F. Barrett, Denise J. Doiron, David A. Green and W. Craig Riddell

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Social Assistance

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Unemployment Insurance Evaluation Series

Human Resources Development Canada (HRDC), in its policies and programs, is committed to assisting all Canadians in their efforts to live contributing and rewarding lives and to promote a fair and safe workplace, a competitive labour market with equitable access to work, and a strong learning culture.

To ensure that public money is well spent in pursuit of this mission, HRDC rigorously evaluates the extent to which its programs are achieving their objectives. To do this, the Department systematically collects information to evaluate the continuing rationale, net impacts and effects, and alternatives for publicly-funded activities. Such knowledge provides a basis for measuring performance and the retrospective lessons learned for strategic policy and planning purposes.

As part of this program of evaluative research, the Department has developed a major series of studies contributing to an overall evaluation of UI Regular Benefits. These studies involved the best available subject-matter experts from seven Canadian universities, the private sector and Departmental evaluation staff. Although each study represented a stand alone analysis examining specific UI topics, they are all rooted in a common analytical framework. The collective wisdom provides the single most important source of evaluation research on unemployment insurance ever undertaken in Canada and constitutes a major reference.

The Unemployment Insurance Evaluation Series makes the findings of these studies available to inform public discussion on an important part of Canada's social security system.

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Abstract

Unemployment Insurance (UI) and social assistance (SA) are the two principal components of the income security system for Canada's working age population. In the 1992–93 fiscal year, the combined expenditures for the two programs accounted for more than $48 billion. In 1992, 1.4 million individuals received UI and approximately 2.7 million received social assistance or welfare.

However, in spite of the size of these programs and recent concerns about their fiscal sustainability, there is very little work, to date, directly examining the interaction between the UI and welfare programs.

The principal objective of this paper is to present descriptive information on the population of UI and welfare recipients in five Canadian provinces. The information is based on data derived from the administration of the welfare and UI programs in the provinces of British Columbia, New Brunswick, Newfoundland, Prince Edward Island and Alberta.

By matching case records for individuals who participate in both programs it is possible to compare the characteristics and experiences of the subset of individuals who use both programs to the larger population of participants of each program separately. In this way it is possible to determine if the UI and welfare programs serve essentially separate, distinct populations or whether they serve a similar set of people.

After presenting basic descriptive information on the overlap in the clientele of the UI and SA programs, the study analyses the impact of SA participation on the duration of UI spells. Due to the limited nature of the SA data in the other provinces, this analysis focusses on New Brunswick and British Columbia.

We find that a large proportion of welfare recipients have some attachment to the workforce and that there is a large overlap in the clientele of UI and SA. There is also evidence of an upward trend over the 1986–92 period in the extent to which the programs serve a common group of participants. Welfare spell durations had a distinct bimodal distribution, with UI-SA interaction concentrated among short welfare spells. SA use was found to be associated with substantially longer UI spells in New Brunswick but not British Columbia.

The evidence suggests that the individuals who participate in both the UI and SA programs may differ in their labour market opportunities and behaviour from those who participate in only one program. However further research is required to better understand the source of these differences.

Introduction

There is very little work directly examining the interaction between the UI and welfare programs.

Unemployment Insurance (UI) and social assistance (SA), also referred to as income assistance or welfare, are the two most important income security programs for Canada's working age population. In the 1992–93 fiscal year, the combined expenditures for the two programs accounted for more than $48 billion, approximately $27 billion being the combined federal, provincial and municipal spending on welfare programs and approximately $21 billion being the expenditure on UI, making these programs the two largest (in terms of expenditure) components of the Canadian social security system (Human Resources Development Canada, 1994a).

Both are also large in terms of the number of individuals and families who interact with the programs. The average number of beneficiaries of the programs during 1992 was 1.4 million for UI and approximately 2.7 million for social assistance or welfare. Over recent years there has been a growing concern for the fiscal sustainability and the efficacy of the income security programs (Human Resources Development Canada, 1994b; OECD, 1994). As a consequence, the federal and several provincial governments have recently been considering major reforms to the income security system.

In considering alternate reform proposals it is important to first understand how individuals use and interact with the current programs. There is a substantial literature examining the use and behavioral effects of UI in Canada. Recent surveys of this literature are provided by Green and Riddell (1993), Corak (1994) and Gunderson and Riddell (1995), among others. Recently a number of researchers, such as Allen (1993), Bruce et. al. (1993), Charette and Meng (1994) and Barrett and Cragg (1995), have begun describing and analyzing how individuals and families interact with Canada's welfare programs.

However, to date, there is very little work directly examining the interaction between the UI and welfare programs. This is an important gap because there is a widespread perception that the two income security programs may increasingly overlap. Because there has been very little previous research on the interaction between UI and SA there is a lack of even basic information. A principal objective of this project is to provide some of this basic descriptive information.

There are several avenues through which the UI and welfare programs may interact. Firstly, welfare is the income security program of last resort. Individuals and families in need, and who are ineligible for benefits under other programs, may turn to welfare for financial assistance. Therefore changes to the UI program that restrict eligibility, or decrease benefit durations, may have the consequence of shifting some individuals onto welfare.

Additionally, changes over time in the economy and the labour market may have contributed to welfare becoming a more frequent source of income support for segments of the workforce, including those who in the past may have relied solely on UI for this purpose. For instance, real wages have been stagnant since the late 1970s and the real wages of younger and less educated workers have declined. Further, the incidence of unemployment has increased, especially among young and less educated workers, and the amount of long term unemployment has risen.

These developments may contribute to individuals, particularly recent labour market entrants and those with limited skills and earnings opportunities, relying on UI and welfare more than previously. These changes in labour market conditions may also mean that the two programs are increasingly serving the same populations.

Administrative practices are another source of interaction between the two programs. For example, in the late 1980s significant backlogs developed in the processing of UI claims. The average time for the processing of a claim increased to more than 2 weeks, the waiting period before benefits may be received on a claim. These processing delays mean that eligible claimants may go without income for several weeks. Because of this hardship, individuals may turn to welfare for assistance while their UI claim is being processed. In the case of British Columbia, Bruce et. al. (1993) have documented the dramatic increase in the "UI pending" welfare caseload which resulted from these administrative features of the UI program.

Another source of interaction between the two programs is the practice of some provincial governments or their agencies of designing "job creation" programs so that social assistance recipients (or those who might otherwise become welfare recipients) will qualify for UI, thus shifting the cost of their income support from the provincially cost-shared social assistance program to the federal UI program. As this example points out, the two programs may interact even in situations where individuals are not observed to participate in both programs within a limited period of time.

The principal objective of this paper is to present descriptive information on the population of UI and welfare recipients in five Canadian provinces. The information is based on data derived from the administration of the welfare and UI programs in the provinces of British Columbia, New Brunswick, Newfoundland, Prince Edward Island and Alberta. The UI program is administered federally while the SA programs are administered provincially. Consequently, although the UI data is consistent across provinces, the information contained in the welfare data files varies across provinces.

The time period covered by the welfare data files also varies across the provinces. As a result, the research summarized in this report covers the interaction of UI and SA in British Columbia and New Brunswick for the years 1986–1992, Newfoundland for 1990–1992, and Prince Edward Island and Alberta for 1991–1992. Because of the limited time period covered by the available data, it is difficult to disentangle longer term trends relating to UI and SA, and their interaction, from the impacts of the 1990–1992 recession. In the cases of Newfoundland, Prince Edward Island and Alberta, separating underlying trends from cyclical factors cannot even be attempted because the administrative data are available only for the period which coincides with the 1990–92 downturn.

By matching case records for individuals who participate in both programs it is possible to compare the characteristics and experiences of the subset of individuals who use both programs to the larger population of participants of each program separately. In this way it is possible to determine if the UI and welfare programs serve essentially separate, distinct populations or whether they serve a similar set of people. To the extent that the two populations of beneficiaries overlap, the characteristics of the people who rely on both programs may be determined along

with the typical time pattern of their interaction with the programs. By using the longitudinal information in the administrative data it is also possible to discern whether the time pattern of the interaction of the programs has changed over time.

After presenting basic descriptive information on the overlap in the clientele of the UI and SA programs, the study analyses the impact of SA participation on the duration of UI spells. Specifically, we test the hypothesis that the duration of UI spells differs according to the welfare history of the claimant. This analysis is limited to the provinces of British Columbia and New Brunswick; the data period for the other three provinces is too short for the analysis to be feasible.

The paper proceeds by briefly outlining the objectives of the UI and welfare programs. In section 2 the data used in the study are described in more detail. In section 3 descriptive statistics on the population of recipients of both programs are presented. Particular attention is paid to the characteristics of individuals who interact with both programs. Section 4 reports our analysis of the relationship between welfare history and the duration of UI spells in the provinces of British Columbia and New Brunswick. The final section summarizes the main conclusions of the study.

1. The Unemployment Insurance Act and the Canada Assistance Plan

... the UI program has increasingly become an income support program in addition to a social insurance program.

Unemployment Insurance

In many respects the UI and welfare programs are fundamentally different, for they were originally designed to serve very different purposes. The UI program was established in 1940 and although the program has substantially changed since then, the program's primary objective remains the provision of insurance to labour market participants for the temporary loss of income during periods of unemployment. With the major reforms in 1971, the goals of the program expanded to include special benefits for absences from work due to sickness, temporary disability and the birth or adoption of a child. By 1971 the UI program covered over 95 percent of all paid workers. During the past two decades in particular, the UI program has increasingly become an income support program in addition to a social insurance program (Gunderson and Riddell, 1995).

However the UI program is not a universal income support program. It specifically excludes individuals who do not have some labour force attachment in the form of recent employment, who are self employed or who have exhausted their benefit entitlement. Furthermore, benefits paid under the program are based mainly on previous earnings rather than need.

Despite the changes to the program since the late 1970s, which generally made the program more restrictive or less generous, UI expenditures and the number of beneficiaries have grown substantially since 1970. Real UI benefit expenditures (measured in 1992 dollars) increased six-fold from less than $3 billion in 1970 to $19 billion in 1992 (OECD, 1994). The average number of weekly beneficiaries grew from approximately 0.7 million in 1976 to 1.4 million in 1991–92. The severe recessions in 1981–82 and 1990–92 were associated with sharp increases in the number of beneficiaries and expenditure; however, there were not equivalent declines in the intervening years of economic growth.

Social Assistance

The present welfare programs in Canada were established under the Canada Assistance Plan (CAP) of 1966. The objective of Canadian welfare programs is to provide financial assistance to all individuals and families in need, irrespective of the causes of the hardship. Unlike UI, welfare is a universal program covering all people in need. Eligibility for the receipt of welfare is not tied to previous employment, benefits are not related to prior earnings nor is there a limit on the length of time a person may receive benefits.

Under CAP the federal government sets broad guidelines on the eligibility criteria and the implementation of the "needs test" by which eligibility is assessed and shares equally with the provinces in the costs of those programs.[1] The provinces are responsible for administering the programs and have substantial discretion in determining the rules and the benefit structure in their jurisdiction. Consequently there is considerable diversity in the welfare programs across the provinces and territories of Canada.

1 However in 1990 the federal government placed an upper limit of total CAP payments to the three "have" provinces of Ontario, Alberta and British Columbia.

A common feature of the provincial welfare programs is the central role of the needs test. To qualify for welfare a household undergoes a budgetary assessment, which takes into account both the household's basic needs and the resources available to meet them. A deficit between assessed needs and available resources qualifies the household for welfare. The amount of assistance depends on the household's budgetary deficit, employability status, and family status and size, subject to a maximum amount.

The welfare programs in Canada have witnessed a similar trend of dramatically increasing caseloads and real resource costs over recent decades. Total real welfare expenditures have increased from $1.7 billion in 1958–59 to $17.6 billion in 1990–91. Since the introduction of CAP in 1966 expenditures have increased almost three-fold. In terms of direct assistance payments, real expenditures increased by 250 percent from 1970–1990. The number of welfare recipients in Canada grew from 1.2 million (or 6 percent of the population) in 1968 to approximately 2.7 million (over 10 percent of the population) in 1992. As was the case for UI, the caseload and real cost of the welfare programs experienced large increases following the recessions of 1980–81 and 1990–92 without a significant decline in the intervening years of economic and employment growth.

2. Data and Methods

The data on welfare use are based on the case records of a random sample of individuals with a history of welfare receipt in the five provinces between 1986 and 1993, though the time period varies from province to province.

The data used in the study are a random sample of case records derived from the administration of UI and the provincial welfare programs. The UI sample is drawn from the Status Vector File of Human Resources Development Canada's UI Longitudinal File. Each record in the sample corresponds to a UI claim initiated by an individual residing in the provinces under study. The file contains information on all the UI claims for a random 10 percent of people with a UI history, in each of the provinces, sometime during the 1986–1992 period. The random sample is generated by drawing the claim records for all individuals with a Social Insurance Number (SIN) ending with the numeral 5. (To preserve confidentiality, the SIN is masked so it cannot be observed by the researcher.)

Information on each UI claim that is used in this study includes the date of benefit period commencement and the duration of the claim period, the total number of weeks in which benefits were paid on the claim, the number of weeks of disqualification or disentitlement, the benefit rate, the number of weeks of insured employment and the sum of insured earnings. There is further information on whether the claim was associated with the developmental use of UI funds (including their use for training, work-sharing and job creation programs) and whether the claimant participated in government sponsored training programs, such as the Adult Occupational Training Act (AOTA) and Canada Jobs Strategy (CJS).

Additionally, the claim type is identified (such as regular, or unemployment related UI; sickness; fishing; maternity/parental; retirement; AOTA).[2] The reason for claim termination is provided and grouped into 5 categories (not terminated, lapsed, exhausted, externally terminated (such as due to disqualification) and terminated at 52 weeks (which is when the benefit period expires)). There is detailed information on the occupation and industry of most recent employment. The demographic information available on the claimant is limited to sex and age.

The data on welfare use are based on the case records of a random sample of individuals with a history of welfare receipt in the five provinces between 1986 and 1993, though the time period varies from province to province. Analogous to the UI file, the random sample is obtained by drawing the records for all individuals with a SIN ending in 5. The raw data consist of a record for each month an individual received welfare. From this file, welfare spells (consecutive months of welfare receipt) were constructed.

For each welfare spell there is information on the start date of the spell and spell duration (in months) and whether it is right censored,[3] plus the sex and age of the recipient. Additional variables common to all the welfare files are family type and employability status. Furthermore, marital status, educational attainment, employment status, UI status and occupation are recorded in several of the provincial welfare files.

2 Records with claim type of "No Trailers Present" were dropped from the analysis. For claims of this type no UI benefits are paid, most likely due to the ineligibility of the claimant as indicted by the very low number of weeks of insured employment.

3 Right censored spells are those that were still in progress at the end of the data period; hence their ending date and the duration of the completed spell is not observed.

The employability status of an individual or family is important in determining their eligibility for assistance and the level of benefits they may receive. The definition of an "employable" person varies across provinces; however, the criteria generally relate to whether the individual, or a family member, has a disability or whether the individual is a single parent.[4] For example, in British Columbia, in 1992, a person was classified as employable if they were not:

- 65 years of age or older;
- temporarily or permanently unable to work due to medical reasons;
- a single parent with one dependent child under six months of age or two or more dependent children under 12 years of age; or
- a single parent required to stay at home to care for a disabled child.

The definition of employability with respect to single parents with young children was most stringent in British Columbia and Alberta. In Alberta, prior to 1991, a lone parent with one child was considered employable if the child was over 4 months of age. In February, 1991 Alberta increased this to two years of age, which corresponds to the age adopted by most other provinces. Newfoundland is exceptional in treating a person as "unemployable" if they received SA benefits for reasons other than unemployment.

A key advantage of these administrative data is that they provide an accurate history of an individual's use of UI and welfare over an extended period of time. This is very important given the limitations of alternative data sources, which are the Survey of Consumer Finances (SCF) and the Labour Market Activity Surveys (LMAS). Both the SCF and the LMAS contain information on UI and welfare receipt; however, it has been found that both surveys underreport government transfer income, which is predominantly UI and welfare, by up to 30 percent. Furthermore the SCF is purely cross-sectional and so cannot be used to analyse the time pattern of individual's interaction with the two programs. Although the LMAS contains longitudinal information, the longest panel covers only 3 years, 1988–90, which severely constrains an analysis of the dynamics of program participation.

An additional advantage of the administrative data includes the fine level of time aggregation (weekly for UI and monthly for welfare) corresponding to the time scale by which the programs are administered. The data also provide detailed program-related information on the individual and their application for benefits.

The limitations of the data, like other administrative data, include the lack of information on individuals when they are not participating in the program plus the limited amount of demographic information they contain, especially in relation to the UI file. An additional limitation of these data derives from the fact the UI program is individual based whereas welfare is family based. In general, if an individual is a member of a family that received welfare and that person was not the principal claimant then he/she will not be observed in the welfare file.[5]

4 See National Council on Welfare (1987) for definitions of "employable" in each province. More recent information is available from the respective departments or ministries of social services.

5 The exception is the welfare file for Prince Edward Island, which contains records for the household head and spouse if both have SINs ending in "5".

Therefore it is not possible to identify the welfare histories of every individual in the UI file. Finally, the very short time period over which the data for Newfoundland, Prince Edward Island and Alberta are available implies that we are unable to analyse the dynamics of social assistance and UI participation and changes over time in these provinces.

The separate UI and welfare files are matched using individuals' SINs. With the matched sample, three exercises are performed:

(a) Descriptive statistics on the population of individuals who began a spell of welfare in specific calender years are generated. Welfare recipients are then grouped according to whether they had a UI claim open during the same calendar year, and summary statistics on the "Non-UI history" and "UI history" subgroups are reported. The results are then compared across years to discern changes in the size and composition of the welfare population, and in the pattern of welfare use. Note that the sample is based on individual recipients[6] and sample division is according to a UI claim being open, but not necessarily being initiated, in the same calender year as the welfare spell began.

(b) Descriptive statistics on the UI claims initiated in specific years are produced. Like the welfare sample, which is based on cases of actual SA receipt, the analysis of UI claims is limited to those claims where UI benefits were actually paid. The set of UI claims is then divided into three groups according to the following hierarchy:

- UI claims where upon the termination of the claim, the individual immediately (within one month) began a spell of welfare receipt;
- UI claims where the claimant had a welfare spell overlapping with the UI claim period; and
- those claims where there was no welfare receipt by the same person during or immediately after the UI claim.

The groups are referred to as the *Subsequent UI-welfare*, *Concurrent UI-welfare* and *UI only* beneficiaries, respectively.[7]

The purpose of this sample division is to firstly distinguish the set of claimants who only use UI from those that use welfare and UI, and then to distinguish among the latter those who tend to move onto welfare following a period of UI receipt. This *subsequent UI-welfare* group is of particular concern to policy makers in that it includes individuals who appear to face the greatest difficulties obtaining or retaining employment. In contrast, the *concurrent UI-welfare* group includes "UI pending" welfare recipients who receive welfare benefits while their UI claim is being processed, and whose receipt of social assistance is thus administrative rather than behavioral in nature.

6 Therefore, if an individual began two or more welfare spells in a given year, the total duration of all spells combined is calculated though the individual's demographic characteristics at the commencement of the first spell are retained.

7 The majority of individuals in the subsequent UI-welfare group also had a separate, prior spell of welfare that overlapped with the initial weeks of the UI claim and hence this group may also be labelled UI-Welfare cyclers.

Overall, exercises (a) and (b) should reveal to what extent the UI and welfare programs serve different populations and, as far as the populations do overlap, the characteristics of the those that do interact with both programs within a limited period of time.

(c) The regular UI claims by males in British Columbia and New Brunswick are matched against the welfare files to determine if the claimant received welfare during a 24 month time period beginning 27 months prior to the commencement of the claim. The UI claims are separated into two groups; claimants with and without a recent history of welfare participation. The samples are then analyzed in a hazard function framework to test whether the receipt of welfare is associated with longer subsequent UI spells.

The criteria used to measure UI-SA interaction in (a), (b) and (c) are necessarily arbitrary. We have chosen to examine the extent of overlapping participation in the two programs within limited periods of time. Thus, for example, welfare recipients who were or are UI beneficiaries in a previous or subsequent year would not be classified in the UI history group. Similarly, those who take more than one month to move onto welfare following the completion of a UI spell would be classified as *UI only* according to (b). Because we restrict the analysis to participation in both programs within limited periods of time, our investigation may understate the magnitude of UI-SA interaction and will be useful as a lower bound measure of the extent to which the two programs serve an overlapping clientele.

3. Features of UI-SA Interaction

A large proportion of the welfare spells which commence in a given year are experienced by single men and women with no dependants.

We have extracted a large amount of information from the UI and SA administrative files and report this information in a sequence of tables which can be found in Appendix A. The tables are organized as follows. First, we use the SA data to describe the characteristics of welfare recipients in each of the five provinces. Information is provided on the total population (some of which is provided in other publicly available sources) as well as for social assistance recipients (SARs) with and without a UI history (information which is generally not publicly available). Second, for the two provinces for which there is a sufficiently long time period (New Brunswick and British Columbia) we examine the duration of welfare spells, and report summary statistics for the total population as well as for those with and without a UI history. Third, we use the UI administrative data to describe the characteristics of UI recipients, and provide this information for the total population as well as breakdowns for the UI only, UI-concurrent welfare and UI-subsequent welfare groups.

Characteristics of Welfare Recipients

Summary statistics on the characteristics of SARs who began a welfare spell in the year noted are reported in Tables A.1–A.3 (for British Columbia), A.4–A.6 (New Brunswick), A.7–A.9 (Newfoundland), A.10–A.11 (Prince Edward Island) and A.12–A.13 (Alberta). Information is provided for the following years, corresponding to the data which is available for each province: 1986, 1989 and 1992 for British Columbia and New Brunswick; 1990, 1991 and 1992 for Newfoundland; and 1991 and 1992 for Prince Edward Island and Alberta.

The content of the tables varies somewhat according to the information available in each province's administrative data. For each province, we report basic demographic information, family type, employability status, and both the number and average duration of welfare spells. Additional information provided for some provinces includes marital status, education, occupation, employment status and disability status, as well as the administrative status of the claim. All of this information is provided for the total SA population in the year in question and separately for those with and without a UI spell in that year.

Not surprisingly, there are both similarities and differences in the nature of welfare recipients in these jurisdictions. In all provinces, the majority of principal claimants are male and the average age ranges from 30 to 35. The average number of dependent children varies substantially across provinces, from about 0.3 in British Columbia to 0.8 in Prince Edward Island and Newfoundland. The average duration of SA spells also varies across provinces, in 1992 from a low of 5.1 months in Alberta to a high of 9.6 months in New Brunswick.

A large proportion of the welfare spells which commence in a given year are experienced by single men and women with no dependants. For example, in 1992 this proportion ranged from approximately 54 percent in Alberta to 71 percent in British Columbia. Single parents accounted for approximately 15 to 20 percent of all welfare spells which commenced in 1992 in the five provinces. A majority of the people who receive welfare in a given year are neither ill nor disabled but are

"employable";[8] during 1992 these accounted for between 63 percent of SARs in New Brunswick to 89 percent of SARs in British Columbia. Although this observation has been made by others, it is worth emphasizing because it contrasts with what continues to be a common perception that welfare is predominantly used by single parents or individuals with disabilities.

Information on educational attainment is provided in the data files for New Brunswick, Newfoundland and Prince Edward Island. For these provinces, welfare recipients, on average, have a low level of formal education. For example, in 1992 from 44 percent to 64 percent of welfare recipients in these provinces had completed schooling of grade 10 or less.

By matching the welfare and UI files we find that a large proportion of welfare recipients also participated in the UI program in the same calendar year. For example, in 1992 the proportion of welfare recipients who also received UI benefits ranged from 32 percent in Alberta, 34 percent in New Brunswick and British Columbia, to 53 percent in Newfoundland and 55 percent in Prince Edward Island. In addition, some of those in the non-UI history group are receiving welfare while awaiting UI benefits, as illustrated for the case of British Columbia in Table A.1. These results suggest that, in recent years, there is a large overlap in the clientele of UI and SA.

There are a number of distinct differences between the UI history and non-UI history groups. In all provinces SARs with a UI history are more likely to be male and "employable" and to have much shorter welfare spell durations. However, in other respects (average age, number of children, family status) there is not a common pattern of differences across provinces between these two groups.

In comparing the descriptive statistics for the welfare spells over time a number of common trends are evident. The strongest, and most obvious, is the dramatic growth in the sample sizes and hence program caseloads. In British Columbia and New Brunswick from 1986 to 1989, a period of relatively strong economic and employment growth, the number of cases grew by 14.5 percent and 3 percent, respectively (see Tables A.1 and A.2 for British Columbia and A.4 and A.5 for New Brunswick). Following the onset of the recession in 1990, the caseloads grew from 1989 to 1992 by a further 62 percent and 39 percent, respectively (compare Tables A.2 and A.3 for British Columbia and similarly for New Brunswick). For the other provinces it is only possible to examine year to year changes in the caseloads after 1990 (again, compare across years for each province); from 1990 to 1992 the number of cases grew by 14 percent in Newfoundland, and from 1991 to 1992 by 17 percent in Alberta and a massive 140 percent in Prince Edward Island.

Although the recession of the early 1990s was an important factor contributing to the growth in welfare recipiency, the upward trend in welfare caseloads during the late 1980s in New Brunswick and, especially, British Columbia cannot be attributed to such cyclical factors. This evidence, together with the observation made

8 As discussed previously, the definition of "employable" varies across provinces and in some provinces has changed over time. Thus some of the differences across provinces in the proportion of SARs who are deemed to be "employable" may be due to these different definitions rather than to differences in the characteristics of the SARs population in each province.

by others that the recessions of 1974–75 and 1981–82 tended to have a ratcheting effect on aggregate caseloads,[9] suggests that underlying structural factors were contributing to a rising proportion of the population being on welfare prior to the 1990s.

Coincident with the growth in the size of the welfare population was a change in composition. Because only New Brunswick and British Columbia are observed for more than 3 years, we focus on the compositional changes in these provinces. In many respects the story is similar in both jurisdictions. Over the 1986–92 period there were significant increases in the proportions of the SA population who are single men and women without dependants, employable, and who also experienced a UI spell in the same year. At the same time, the proportion of single parents on welfare declined and the average duration of welfare spells fell dramatically — in British Columbia from over 14 months in 1986 to 6.7 months in 1992 and in New Brunswick from 19.2 months in 1986 to 9.6 months in 1992.[10]

Although the recession of 1990–92 and the changes made to the UI program in the early 1990s are often cited as factors contributing to these changes in the nature of the SA caseload, it is clear from Tables A.1–A.3 and A.4–A.6 that additional factors must be at work. Indeed, most of the changes noted above — the increasing overlap in the clientele of the SA and UI programs, as measured by the fraction of SA recipients receiving UI in the same year, the rise in the number of single men and women on welfare, the increasing proportion of the SA population deemed to be employable, and the decline in the average duration of SA spells — occurred to a equally large or even greater degree between 1986 and 1989, a period of strong employment growth, than between 1989 and 1992.

Duration of Welfare Spells

Since the data files for New Brunswick and British Columbia cover a longer period of time, we are able to analyse the length of welfare spells in these two provinces. These results are reported in Tables A.14–A.16 for British Columbia and A.17–A.19 for New Brunswick. For each of the years 1986, 1989 and 1992 the tables show summary statistics on the SA population broken down by the following spell durations: 1–3 months, 4–6 months, 7–9 months, 10–12 months, 13–18 months and 19 months and over. Data for all durations are also reported for comparisons with the population as a whole.

A number of conclusions are evident from these tables. Perhaps the most striking feature is that in both provinces and for all three years, there are both large numbers of short and of long welfare spells. The majority of those who receive welfare in a given year tend to remain on the program for six months or less (and most of these have spells of 1–3 months); however, there is also a substantial number who remain on the program for more than 18 months. The distributions of welfare spells have a distinct bimodal character. SARs with short spells are more likely to

9 That is, the increase in the caseloads following the onset of the recessions were not mirrored by a similar decline during the ensuing recovery: see OECD (1994) and Brown (1995).

10 Because there are large differences in the duration of welfare spells according to such factors as age, family type and employability status (see Barrett and Cragg, 1995, for evidence from the province of British Columbia), changes in the composition of the SARs population can be expected to result in changes in average spell duration.

be male, young, single or a member of a two parent family, and employable. The New Brunswick data also indicate that individuals with higher levels of completed education tend to have significantly shorter welfare spells. Those with long spells are more likely to be single parents and individuals who were either ill or disabled and unable to work. Although not shown in the tables, further examination of the spell duration data reveals that a small subset of these groups remain on the program for several consecutive years, and therefore account for a greater proportion of the population in receipt of welfare at a point in time and of total welfare expenditures over a period of time.

In both New Brunswick and British Columbia, a large proportion of the short welfare spells involve individuals who also received UI in the same year. Indeed, in both provinces more than half of the 1–3 month spells are experienced by such individuals. Thus examining the welfare data alone could result in an inappropriate characterization of these individuals' labour market behaviour and opportunities. Although they are able to exit from welfare quickly, their total reliance on income support is greater than suggested by the welfare case history alone.

The proportion of SARs with a UI history declines with spell duration, but nonetheless remains substantial even for those who experience very long spells. In British Columbia, over 20 percent of welfare recipients with spells exceeding 18 months also had a UI claim open during each of the years 1986, 1989 and 1992. The comparable figures are somewhat lower in New Brunswick, and vary from 13 to 22 percent depending on the year. Thus in both provinces, UI-SA interaction is substantial across the distribution of welfare spell durations, although more concentrated among the shorter spells.

UI Beneficiaries

A further dimension of the UI-SA interaction is revealed by examining UI spells and dividing claimants according to their receipt of welfare. Summary statistics are reported in Tables A.20–A.22 (for British Columbia), A.23–A.25 (New Brunswick), A.26–A.28 (Newfoundland), A.29–A.30 (Prince Edward Island) and A.31–A.32 (Alberta). As was the case previously, we report information for the years 1986, 1989 and 1992 for British Columbia and New Brunswick, 1990, 1991 and 1992 for Newfoundland, and 1991 and 1992 for Prince Edward Island and Alberta. The UI data contain only limited demographic data (age and gender) but do provide detailed information on the UI claim as well as information on occupation and industry of last employment.

The descriptive statistics for the samples of UI spells in a given year show that the average claim period is substantially longer than the duration of actual benefit payments (even when the waiting period is taken into account). For example, in 1992 the average claim period varied from 44.9 weeks in British Columbia to 46.8 in New Brunswick, whereas the average number of weeks of benefit payments were 24.3 and 28.6, respectively. The average number of weeks of insured employment supporting the UI claims in 1992 varied from 22.3 in Newfoundland to 39 in Alberta.

The vast majority of the UI claims are for regular, or unemployment related, benefits. Generally, the most common reasons for claim termination are due to claims lapsing, presumably because the claimant found employment, or because the

claim period (52 weeks) expired. However, as discussed below, the reasons for claim termination vary greatly across subgroups of claimants and over time with the business cycle.

As described in section 2, the UI spell samples are stratified into three groups, the *UI only* claimants, the *concurrent UI-welfare* claimants and the *subsequent UI-welfare* claimants. While most UI beneficiaries belong to the UI only group, a significant fraction are in one of the UI-welfare groups. For example, in 1992, approximately 15 percent of claimants in British Columbia, 13 percent in Alberta, 10 percent in Prince Edward Island and 7 percent in New Brunswick and Newfoundland, were in the combined welfare subgroups.

In general, claimants in the welfare subgroups of the UI populations have, on average, longer UI claim periods and weeks of benefit receipt but fewer weeks of insured employment. In addition, the insured earnings of members of the welfare subgroups are, on average, significantly lower than that for the population of UI beneficiaries as a whole. The UI-welfare subgroups also exhibit a higher incidence of benefit exhaustion. The findings suggest that individuals in the UI-welfare subgroups differ from other UI claimants in their labour market opportunities and behaviour.

In comparing the two UI-welfare subgroups, the concurrent user group generally accounts for a greater proportion of claimants. The subsequent UI-welfare users generally have, on average, more weeks in which benefits were paid though fewer weeks of insured employment. Moreover, the subsequent UI-welfare group has the lowest average insured earnings, and hence benefit levels, and the greatest incidence of UI benefit exhaustion. For this group, benefit exhaustion tends to be the most common reason for claim termination except in British Columbia where "benefits lapsed" tends to dominate. This difference may be the consequence of the more buoyant economic conditions in British Columbia than in the other provinces during this period.

A number of common changes over time were evident in these five provinces. There is much clearer evidence of cyclical sensitivity of the UI caseload than was the case for welfare. From 1986 to 1989, a period of strong economic and employment growth, the number of UI recipients changed by -4 percent and +9 percent in British Columbia and New Brunswick respectively. Following the onset of the recession in 1990, the number of UI claimants increased from 1989 to 1992 by 19 percent in British Columbia and 28.6 percent in New Brunswick. The number of claimants in Newfoundland increased by over 27 percent from 1990 to 1992; in Alberta and Prince Edward Island the increase from 1991 to 1992 was 7 percent and zero percent respectively. With the exception of Prince Edward Island, the number of UI claimants grew dramatically as the 1990–1992 recession progressed.

The experience of Prince Edward Island stands out as a special case. From 1991 to 1992 the aggregate UI caseload in Prince Edward Island remained static while the welfare caseload increased by 140 percent. Coinciding with the increase in the size of the welfare population were significant changes in composition; these included increases in the proportion of claimants who were employable and who were employed in seasonal jobs. At the same time, the average duration of welfare

spells declined, indicating that the welfare population were more mobile, exiting the program more quickly in 1992. Although the limited time period covered by the Prince Edward Island data precludes further analysis, the evidence suggests that many individuals who would normally rely on UI for income support shifted to welfare as the recession proceeded to take its toll on economic activity.

... many individuals who would normally rely on UI for income support shifted to welfare as the recession proceeded to take its toll on economic activity.

Further developments evident from the analysis of the UI samples include the substantial increase in the average length of the claim period, with little or no increase in the duration of benefit payments. With the progression of the 1990–1992 recession, there was a substantial increase in the incidence of benefit exhaustion in all five provinces. The increase in average claim durations but little (or negative) change in the duration of benefit payments, and the increase in incidence of benefit exhaustion were more pronounced among the UI-welfare groups, especially the subsequent UI-welfare group.

In the two provinces for which data are available over the 1986–92 period, there is evidence of a trend toward an increasing proportion of UI claimants to be classified in the UI-welfare subgroups. In British Columbia, the fraction of UI claimants who also interacted with the welfare program in a limited period of time increased from 6.6 percent in 1986 to 9.8 percent in 1989 to 15.1 percent in 1992. In New Brunswick, the comparable proportions were 4.7, 5.1 and 6.6 percent respectively. Thus examination of the UI data yields a similar conclusion to that obtained with the welfare data — an increased tendency for individuals to interact with both programs that was in place prior to the recession of the early 1990s.

4. Social Assistance and the Duration of UI Spells in British Columbia and New Brunswick

... when on welfare an individual is unable to accumulate work experience and their human capital may depreciate.

This section reports the findings of an analysis of one particular form of interaction between UI and welfare. Specifically, we test the hypothesis that the duration of UI benefit receipt differs according to the welfare history of the claimant.

There are several potential reasons why the receipt of welfare may influence an individual's subsequent use of UI. For example, by participating in the welfare program individuals may learn new information regarding the program administration, rules and benefit levels. These individuals would then be aware of the income that is available from welfare and which may be used to subsidise job search beyond UI exhaustion. Consequently, if unemployed and on UI, these individuals may not search as intensively, or may not lower their reservation wage as much as other UI claimants, as benefit exhaustion approaches.

In addition to the learning or informational effects of welfare participation on subsequent UI behaviour, the receipt of welfare may have a "scarring" effect on an individual's future labour market opportunities. To be on welfare individuals generally have to be unemployed. Consequently, when on welfare an individual is unable to accumulate work experience and their human capital may depreciate.[11] Furthermore, employers may use individuals' labour market histories in the screening of job applicants or in the determination of wage offers. Together, these factors introduce negative conditioning between an individual's participation in the welfare program and their future employment prospects and hence use of the UI program.

The objective is to test the hypothesis that the receipt of welfare in the recent past increases the average duration of UI spells. Given the nature of the data, it is not possible to identify the particular avenues (informational, human capital, screening etc.) through which this interaction may occur. In investigating this hypothesis it is important to control for the impact of UI benefit entitlement on the length of UI spells as well possible duration dependence effects of the UI program.[12]

Economic Model

The hypothesis of welfare receipt leading to longer subsequent UI spells can usefully be described in the context of a job search model. The negative impact of past welfare receipt on UI spell durations is posited to occur through learning about the welfare program; as stated above, this mechanism leading to the interaction between welfare and UI use is observationally equivalent to the human capital and employer screening impacts.

A popular way to model unemployment and UI spell durations is with dynamic job search models. Mortensen (1977) presents a dynamic search model where the

11 Similar effects, of being unable to acquire work experience while human capital depreciates, are likely to occur when receiving UI.

12 A worthwhile extension of the research presented here would be to control for unobserved individual characteristics (also known as unobserved heterogeneity). In this way, one could test whether any observed state dependence effects between UI and welfare are a product of the programs themselves or a reflection of unobserved individual characteristics (such as motivation, or for the data set at hand, education) which are correlated with longer expected UI spells.

hazard rate from unemployment and UI (the probability of exiting from unemployment and UI at week t, given that the UI spell has lasted t weeks) is proportional to:

$$s[1 - F(w)]$$

where s is search intensity, w is the individual's reservation wage and $F(.)$ is the cumulative distribution of wage offers. According to this model the hazard is increasing in search intensity because the arrival of job offers increases. Additionally, the hazard rate rises as the reservation wage declines because the likelihood of a job offer being acceptable increases. As an individual gets closer to benefit exhaustion s increases while w decreases, both implying that the hazard rises as exhaustion approaches.

After exhaustion, the individual may move onto welfare. Those with prior welfare receipt are potentially better informed about that program and thus face lower fixed costs of receiving welfare. Therefore, the prediction to be tested is that individuals with a recent welfare history tend to search less intensively and do not lower their reservation wage as much during the course of a UI spell as other UI claimants.

Data

The data used in this part of our analysis are similar to those used previously. The data on welfare participation are based on case records of a random sample of individuals with a history of welfare receipt in British Columbia and New Brunswick between 1986 and December, 1993. The UI data are restricted to the subset of regular UI claims initiated by men in British Columbia from January, 1988 to December, 1992 and in New Brunswick from April, 1988 to December, 1992. Claims that were for developmental purposes or where the claimant participated in government sponsored training programs were dropped from the sample. This step was taken because it is important to control for the potential duration of UI benefits in the empirical analysis, and this variable could not be accurately constructed for this special set of UI claims. Furthermore, the behaviour of claimants involved in training is potentially very different from the behaviour of UI claimants in general and merits a separate analysis.

The UI claims were matched with the welfare spell file using individual's masked SINs. The analysis is restricted to men because the matching of the UI and SA data is much more complete for this group. Each UI claim in the sample was matched against the welfare spell file to see if within a 24 month window, beginning 27 months prior to the commencement of the UI claim and ending 4 months prior to the UI claim, the individual had recently received welfare benefits. The time window with which to examine an individuals' welfare history was constructed so as to allow adequate time for a person to have been on welfare and in employment, in order to be eligible for UI. Additionally the time window ended three months prior to the UI claim commencement so to avoid sampling predominantly "UI pending" welfare spells.[13] These welfare spells are a product of administrative practices of the UI system rather than of individual behaviour, and in terms of the

13 As noted previously, the UI pending welfare spells accounted for an important part of the increase in the British Columbia welfare caseload in the late 1980's (see also Bruce *et. al*., 1993).

characteristics of such welfare spells, they are a special group which deserve a separate analysis.

The set of UI claims is separated into 2 groups, claimants with and without a recent welfare history. The primary variable examined in the analysis is the number of weeks that benefits were actually received on the UI claim. This definition of a UI spell may not correspond to consecutive weeks of UI receipt. While the UI claim is open, an individual may not receive any benefits in a given week due to full-time employment or disqualification. This definition of a UI spell — aggregate weeks of compensation paid on the UI claim — is very general.

An important variable in the analysis is the maximum potential duration of benefits payable on the UI claim. This variable was constructed using the number of weeks of insured employment in the qualifying period and the regional unemployment rate and the entitlement formula to calculate benefit entitlement as defined in the program rules. With this information, the number of weeks of benefit entitlement not utilised (or time until benefit exhaustion) was constructed. However UI claims that ended in exhaustion (15 and 22 percent of all claims in British Columbia and New Brunswick, respectively), were externally terminated or remained unterminated (7.8 and 11.8 percent in British Columbia and New Brunswick, respectively) were treated as right-censored.

Results

Summary statistics on the sample of UI claims for British Columbia are presented in Table 1. From the full sample of 42,946 UI claims, 37,519 (87 percent) were without a matched welfare spell while 5,427 (13 percent) did have a recent welfare history. The average duration of benefit entitlement is marginally greater for the non-welfare history sample at 45.9 weeks. The actual weeks of benefit receipt were approximately 2 weeks greater, at 28.5 weeks, for the welfare history sample. Correspondingly the average time until exhaustion is approximately 2.5 weeks less (at 16.8 weeks) for the welfare history sample. These summary statistics suggest that, in British Columbia, UI claimants who recently received welfare tended to have slightly longer UI spells and used up more of their benefit entitlement than other UI claimants.

Table 1
Summary Statistics on UI Claims in British Columbia, 1988–1992

Variable	All UI Claims	Non-Welfare Population	Welfare Population
Claim duration	39.121	38.868	40.869
Weeks paid	26.568	26.293	28.457
Duration of entitlement	45.776	45.846	45.294
Weeks until exhaustion	19.154	19.500	16.765
Benefit rate	211.921	216.903	177.134
Insured weeks	36.777	37.282	33.286
Regular unemployment rate	0.106	0.106	0.107
Age	35.486	36.092	31.295
Right censored	0.233	0.232	0.244
Observations	42,946	37,519	5,427
Sample percent	100	87	13

Table 2
Summary Statistics on UI Claims in New Brunswick, 1988–1992

Variable	All UI Claims	Non-Welfare Population	Welfare Population
Claim duration	42.299	42.028	44.425
Weeks paid	27.693	26.991	33.197
Duration of entitlement	45.786	45.908	44.835
Weeks until exhaustion	18.093	18.917	11.638
Benefit rate	284.710	291.453	231.828
Insured weeks	25.729	26.375	20.660
Regular unemployment rate	0.140	0.140	0.142
Age	35.303	35.497	33.783
Right censored	0.338	0.324	0.456
Observations	22,706	20,138	2,568
Sample percent	100	89	11

Summary statistics on the sample of UI claims in New Brunswick are presented in Table 2. Of the sample of 22,706 UI claims, 20,138 (88.7 percent) were without a welfare history while 2,568 (11.3 percent) did have a recent history of welfare receipt. The average length of the benefit entitlement in New Brunswick was very similar to that for British Columbia at 45.8 weeks. In New Brunswick, the benefit entitlement was marginally less for the welfare history group; however, the actual weeks of benefit receipt were substantially greater (over 6 weeks greater at 33.2 weeks) for the welfare history group. As a result, the average time until exhaustion is 7 weeks less for the welfare history sample (at 11.6 weeks). These descriptive statistics show that UI claimants in New Brunswick who recently received welfare had substantially longer UI spells and utilised more of their entitlement, on average, than other UI claimants. Furthermore, the differences between the welfare and non-welfare history groups are much greater in New Brunswick than British Columbia.

There are a number of additional differences in the characteristics of the welfare and non-welfare history groups common to British Columbia and New Brunswick, as revealed in Tables 1 and 2. The number of weeks of insured employment and the benefit rate, which is based on prior earnings, are substantially less for the welfare subsample. Further, the welfare history group members tend to be younger (especially in British Columbia) and hence are likely to have less labour market experience. Lastly, the regional unemployment rate is slightly higher, on average, for the welfare history sample indicating they are in weaker local labour markets.

A more complete picture of the duration of UI spells is shown in Figures 1 and 2, which plot the empirical hazard rate function for the number of weeks of UI benefit receipt. The figures present separate plots for the non-welfare and welfare history groups for British Columbia and New Brunswick, respectively. Figure 1 shows that in British Columbia approximately 5 percent of claimants in both groups exit UI within the 2 week waiting period and hence do not receive any benefits. For spells from 1 to 36 weeks long, the conditional probability of individuals exiting the program is marginally higher for the non-welfare history group. Over the longest spells, from 37–50 weeks in length, the hazard rate is generally higher

Figure 1
British Columbia UI Benefit Receipt Empirical Hazard

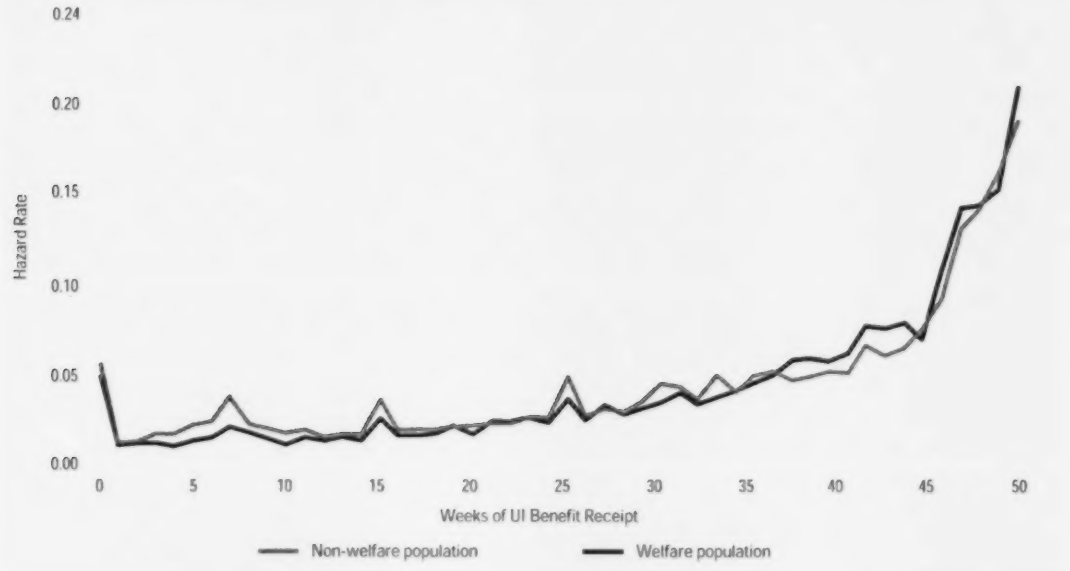
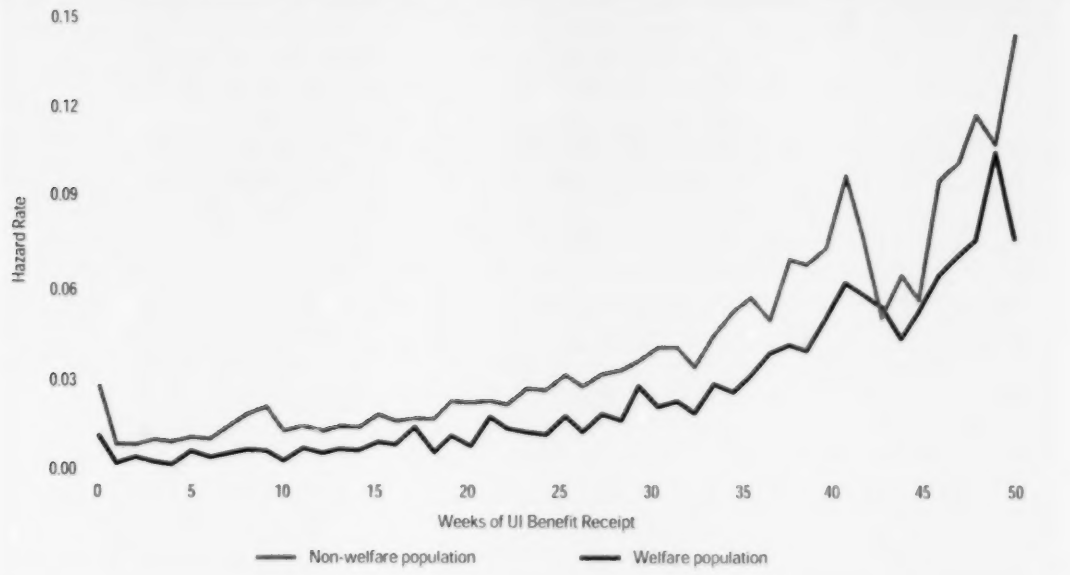


Figure 2
New Brunswick UI Benefit Receipt Empirical Hazard



for the welfare history group. The major conclusion from Figure 1 is that, for both groups in British Columbia, the exit rate from UI increases slightly over short durations and then dramatically increases at spell lengths of 40 weeks or more.

Figure 2 shows that in New Brunswick approximately 3 percent of claimants in the non-welfare group exit UI within the 2 week waiting period. For the welfare group, only 1 percent of claims end within the waiting period. Further, as found for British Columbia, the hazard rate from UI, for both groups, increases gradually over short spell lengths and then increases more dramatically over the longest spells. There is a spike in the hazard rates for the two groups between 40 and 42 weeks which is explained by the fact that a large proportion of claimants exhaust their entitlement in this range. This underscores the need to control for initial entitlement when analyzing the exit rate from UI. The common pattern of an increasing exit rate from UI is consistent with the predictions of the search model discussed above, with the exit rate increasing as spell length increases and as benefit exhaustion approaches.

A major feature of Figure 2 is that the hazard rate function for the welfare history group lies below that for the non-welfare history group at all spell lengths. Unlike the exit rate plots for British Columbia, the hazard rates for the two groups in New Brunswick do not converge and the welfare group of UI claimants clearly has a lower exit rate than the non-welfare group. Therefore, the welfare group have a substantially longer expected UI spell duration in New Brunswick.

An alternative way to present the information on the duration of UI spells is by plotting the empirical survival curve. Figures 3 and 4 plot the empirical survival

Figure 3
British Columbia UI Benefit Receipt Survival Function

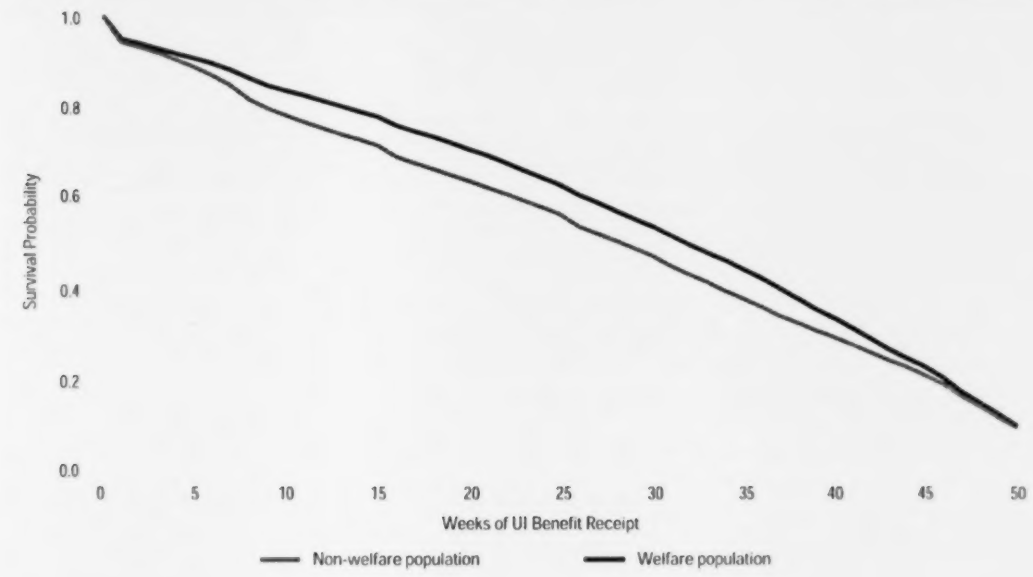
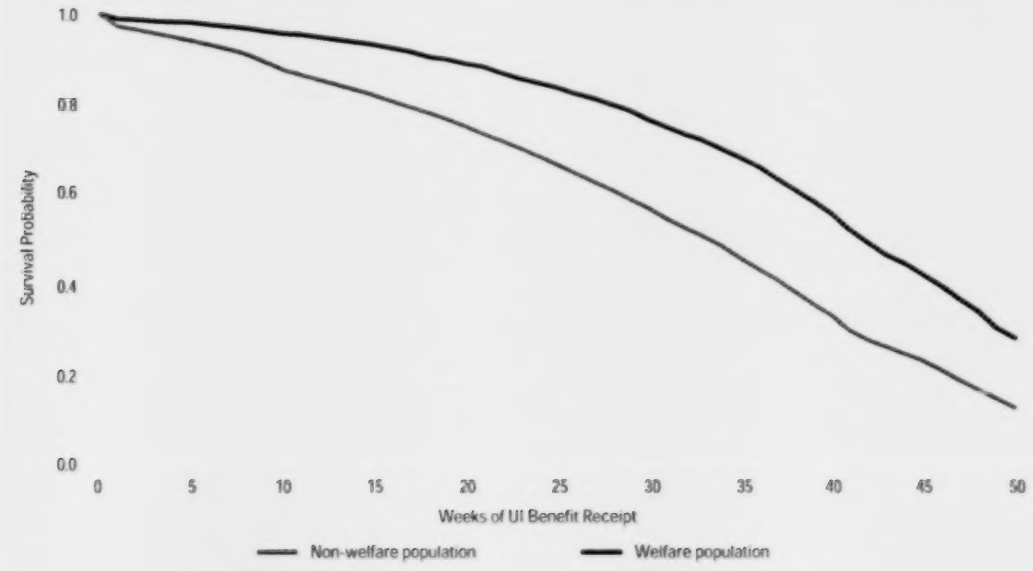


Figure 4
New Brunswick UI Benefit Receipt Survival Function

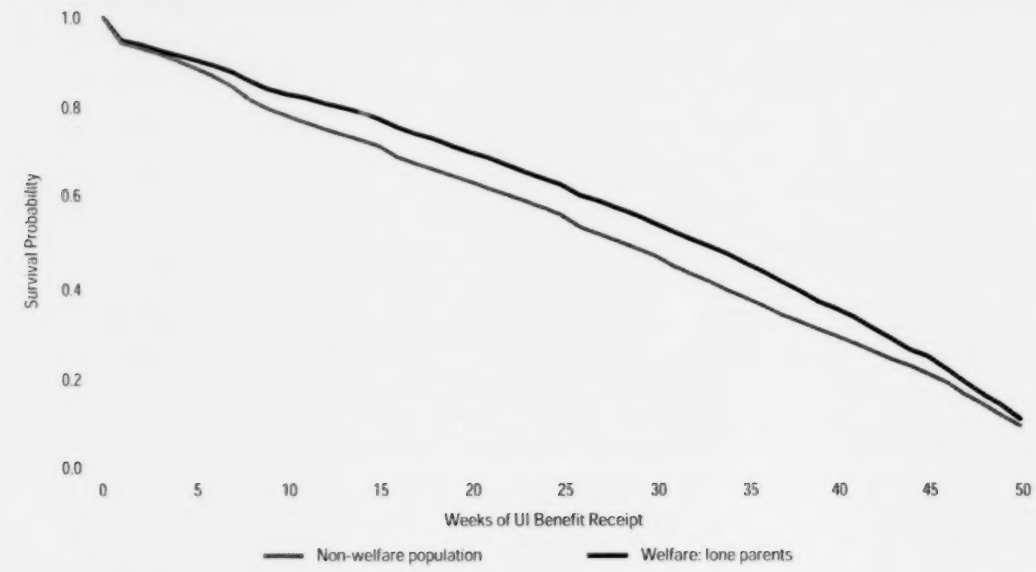


curves for the non-welfare and welfare history samples in British Columbia and New Brunswick, respectively. The survival curve plots show more clearly that the welfare history sample tend to have longer UI spells. Figure 3 shows that, in British Columbia, approximately half of the UI spells end within 28 weeks for the non-welfare history sample and within 32 weeks for the welfare history sample. However, as the exit rate is slightly higher for the welfare history group at longer durations, the survival curves converge over the 37–50 week range. One third of the spells by the non–welfare group are ongoing after 40 weeks; however, over 55 percent of spells by the welfare group remain in progress. The difference in the empirical hazard and survival curve plots for British Columbia is consistent with the welfare history group searching less intensively for employment during the initial weeks of a UI claim, but then either searching relatively more intensively or lowering their reservation wage more quickly as the spell progresses. The figures do not suggest that the welfare history group are substantially less likely overall to exit from UI than the non-welfare group in British Columbia, nor do they indicate a higher incidence of benefit exhaustion.

It is possible that the impacts of prior welfare receipt on UI spell durations are greatest for the set of individuals that have relatively greater entitlements under the welfare program. This would correspond to lone parent families, for whom welfare benefits are relatively more generous than for other family types.[14] Figure 5

14 National Council of Welfare (1993) shows that in British Columbia (and most other provinces) lone parents with 2 or more dependent children and who qualify for welfare are financially better off on the program than working fulltime in a minimum wage job.

Figure 5
British Columbia UI Benefit Receipt Survival Function



presents the empirical survival curve plots respectively for the lone parent subset of the welfare history sample, relative to the non-welfare history group, in British Columbia. The figure shows that lone parents have longer expected UI spell durations than the average welfare history group; however, even this subset of the welfare history group does not appear to act substantially differently, in their use of UI, than the non-welfare history group in British Columbia.

Turning to New Brunswick, Figure 4 shows that approximately half of the UI spells end within 33 weeks for the non-welfare history sample and within 41 weeks for the welfare history sample. However, the survival curves do not converge over the longer durations. Figure 4 clearly shows that the two groups of UI claimants in New Brunswick do exhibit very different behaviour while on UI. The difference in the empirical hazard and survival curve plots for New Brunswick is consistent with the welfare history group searching less, or not decreasing their reservation wage as much, over the duration of the UI claim and hence experiencing a substantially higher incidence of benefit exhaustion.[15,16]

The next step in the analysis is to take into account time until benefit exhaustion. The differences in the duration of UI spells may, in part, be due to differences in the length of benefit entitlements. Figures 6 and 7 illustrate the time until exhaustion empirical hazard rate function for the welfare and non-welfare history samples in

15 The results are also consistent with the welfare history group having more limited employment opportunities.

16 The sample size for the lone parent family subsample of the welfare history group in New Brunswick was too small for the empirical survival function to be estimated separately.

Figure 6
British Columbia Time Until UI Exhaustion Empirical Hazard

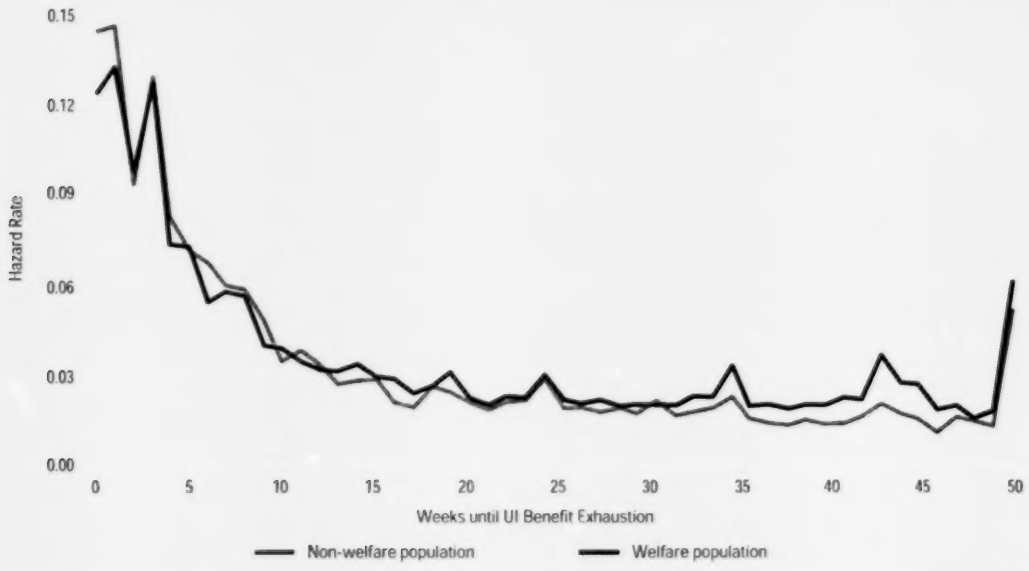
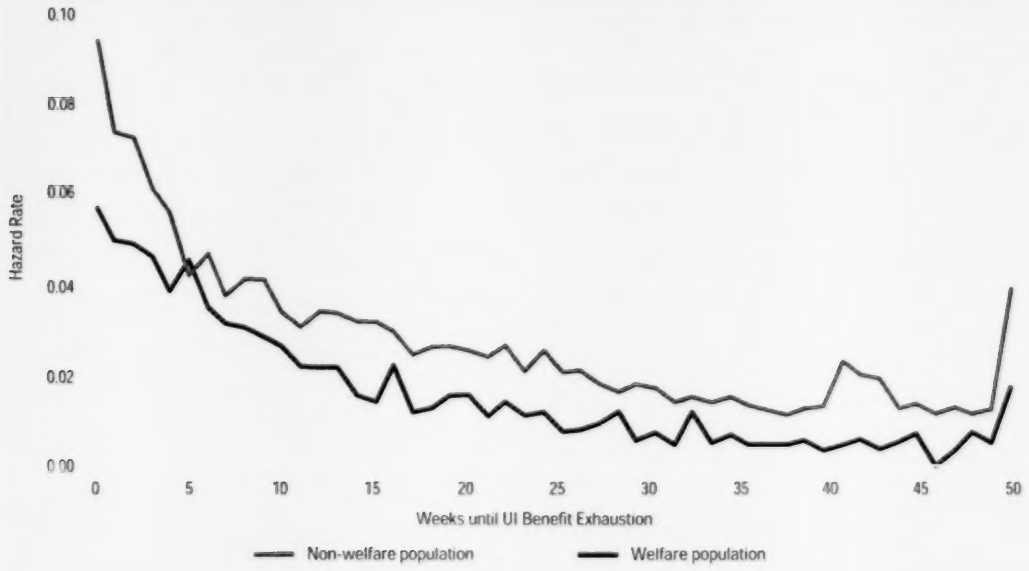


Figure 7
New Brunswick Time Until UI Exhaustion Empirical Hazard



British Columbia and New Brunswick, respectively. Note that these are not the same as Figures 1 and 2 with the time axis reversed, since there is variation in the length of benefit entitlement. For example, the risk set for the estimation of the time until exhaustion hazard rate at 30 weeks is given by the set of claims that have an entitlement of at least 30 weeks in duration and were not completed or right censored with more than 30 weeks of entitlement remaining.

The general shape of the hazard functions in Figures 6 and 7 are consistent with the search model and show a marked increase in the exit rate from UI as benefit exhaustion approaches. Figure 6 confirms that in British Columbia there is not a dramatic difference in the exit rate from UI for the welfare history group relative to the non-welfare history group. Conversely, Figure 7 shows that in New Brunswick the welfare history group do have lower exit rates from UI, even after controlling for initial entitlement, and are substantially more likely to remain on the program until benefits are exhausted.

Conclusions

This section examined the effect of prior welfare receipt on the duration of subsequent UI spells. We find that individuals who had received welfare in the two years prior to the UI spell tend to remain on UI longer (approximately 2 and 7 weeks longer in British Columbia and New Brunswick, respectively). After controlling for the maximum potential duration of benefits, it was found that in British Columbia the group with a recent welfare history had very similar exit rates from UI compared to the non-welfare history group. However, in New Brunswick the two groups exhibited very different behaviour, with the welfare history group exhibiting significantly lower exit rates from UI and a higher incidence of UI exhaustion. Therefore in New Brunswick, but not British Columbia, the prior receipt of welfare is associated with a substantially longer expected duration of subsequent UI spells.

The empirical analysis was motivated by a dynamic model of job search. The empirical findings for New Brunswick are consistent with the welfare history group having better knowledge of the welfare system and therefore searching less intensively, or not reducing their reservation wage, while on UI, relative to the non-welfare group. However, this is not the only possible explanation of the findings. As noted above, the hypothesis examined is also consistent with "scarring" effects of welfare receipt, through human capital depreciation or employer screening, on individual's labour market opportunities. With the data examined in this study, it is not possible to determine the actual cause of the negative conditioning of welfare receipt on subsequent UI spell duration in New Brunswick.

The results of this study suggest several important avenues for future research on the interaction between UI and SA. Firstly, for the design of appropriate policy responses, it would be useful to test the competing explanations of the negative impact of welfare receipt on exit rates from UI in New Brunswick. Secondly, the findings of the analysis for New Brunswick contrast strongly with those for British Columbia; in the latter the welfare and non-welfare groups were found to have very similar behaviour. Therefore, it is important to understand why the results are so dramatically different; are the different findings due to differences in local labour market conditions or the characteristics of the welfare populations or perhaps differences in the operation of the welfare programs?

5. Conclusions

... a large proportion of welfare recipients have some attachment to the workforce and there is a large overlap in the clientele of UI and SA.

Most analyses of the labour market effects of social programs focus on one program at a time, in many cases on one or a few specific features of that program. Yet in designing public policy it is important to not only be aware of the behavioral effects of individual programs and policies, but also to take account of how the various components of the income security system interact with each other. As a consequence there is a need for research on the extent to which programs have a common set of participants and how any overlap in program participation affects behaviour.

Unemployment Insurance and social assistance are the two principal components of the Canadian income security system for the working age population. Although the effects of both programs have been analyzed separately (especially the effects of UI, which have been extensively investigated), there has been little previous research on the interaction between UI and SA. As a consequence there is a lack of even basic information about the extent to which the participants in the two programs overlap.

A principal objective of this study is to provide some of this basic information. The recent availability of administrative data on SA for five provinces, and the availability of UI administrative data, provides the opportunity to begin the analysis of UI-SA interaction in Canada. Unfortunately, the limited time period covered by the SA data for the provinces of Newfoundland, Prince Edward Island and Alberta implies that we can only provide a picture of how UI and SA interact in those provinces at a point in time, the early 1990s. The social assistance data for New Brunswick and British Columbia are available since 1986, and we are thus able to examine changes over the 1986–92 period — a period which includes the strong economic growth of the 1980s and the severe recession of the early 1990s — in these provinces.

In analyzing the welfare files we find that a large proportion of welfare recipients have some attachment to the workforce and that there is a large overlap in the clientele of UI and SA. In 1992, the most recent year covered by our data and a year for which we have data for all five provinces, the proportion of welfare recipients who also had a UI claim open in the same year varied from approximately one-third in Alberta and New Brunswick to more than one-half in Prince Edward Island and Newfoundland. These results may understate the extent to which UI and SA provide income support to a common set of individuals and families for two reasons. First, we employed a limited time period of the same calendar year in our analysis. The proportion of welfare recipients who had a UI claim open in either the same or an adjacent calendar year would be larger still. Furthermore, because UI claims are associated with individuals and welfare claims with families, our matching of UI and SA participants misses some individuals who receive income support from both programs — specifically those UI recipients who are members of a family receiving welfare, but not the principal claimant in that family.

In our examination of the interaction between UI and SA in British Columbia and New Brunswick, we also find clear evidence of an upward trend over the 1986–92 period in the extent to which the programs serve a common group of participants.

An interesting finding is that this trend toward increasing overlap between UI and SA was evident during the 1986–89 period, as the economy approached a cyclical peak. Indeed, in the case of British Columbia, most of the growth in the program overlap occurred prior to the onset of the recession of the early 1990s; in New Brunswick as much of the growth occurred in the 1986–89 period as in the 1989–92 period.

We also find, as have other recent studies of welfare participation (such as Brown, 1994, and Barrett and Cragg, 1995), that there is a growing tendency for individuals with characteristics normally associated with high employability and strong labour market attachment — young single men and women and members of two parent families — to increasingly rely upon welfare. The clientele for which the SA programs were originally conceived and designed, the disabled and single parent families, accounted for a diminishing proportion of recipients over this time period. The growth in the overlap in the clientele of the SA and UI programs and the changing nature of the welfare caseload in Canadian provinces are two aspects of the same phenomenon.

Accompanying this change in the composition of the social assistance population was a substantial decline in the average duration of welfare spells. For example, in British Columbia average spell duration declined from more than 14 months in 1986 to 9.4 months in 1989 and to 6.7 months in 1992. Similar changes occurred in New Brunswick

A number of potential factors may have contributed to these trends. The recession of 1990–1992 clearly affected the labour market opportunities of many individuals and likely contributed to many long-term unemployed relying upon welfare. Reforms to the UI program that reduced the generosity of the program may have lead some individuals to rely more on welfare than UI. However, these two explanations both relate to changes which took place in the 1990s. Our examination of the behaviour of UI and SA in British Columbia and New Brunswick over the 1986–92 period makes clear that other factors must have been at work. Further research is required to determine the causes of the changes which occurred in the 1980s.

A good deal of policy attention focuses on the duration of UI and SA spells. For British Columbia and New Brunswick we are able to document the extent to which UI and SA participants overlap among spells of different durations. In both provinces the changing nature of the SA population has resulted in a distribution of welfare spells with a distinct bimodal nature. There are both a large number of very short spells and a smaller but nonetheless substantial number of very long spells. The UI-SA overlap is concentrated among the short spells; in both British Columbia and New Brunswick, more than half of the 1–3 month spells involve individuals with a UI claim in the same year.

This examination of the interaction between UI and SA according to the duration of SA spells has a potentially important policy implication. Researchers using SA data *alone* have observed that a large number of SA spells end relatively quickly, and have concluded from this observation that these individuals do not face significant labour market problems (Barrett and Cragg, 1995). However, because many of these individuals also experienced a UI claim prior to their welfare spell,

the duration of their period of receipt of income support is much longer than is indicated by the duration of their welfare spell alone. The brief nature of their period in receipt of SA may be a misleading indicator of the difficulties they face in obtaining employment.

A further dimension of the UI-SA interaction was revealed by examining the UI spell samples and dividing claimants according to their use of welfare. This analysis also points to a substantial overlap in participation in the two programs. In 1992, the proportion of UI claimants who received both UI and welfare in a limited time frame varied from 7 percent in New Brunswick and Newfoundland to 15 percent in British Columbia The UI files matched to SA data also indicate growth in the extent to which the programs serve the same group of individuals over the 1986–92 period in British Columbia and New Brunswick In both provinces, there is evidence of the two programs increasingly serving an overlapping clientele during the expansionary period of the late 1980s, with the trend continuing during the downturn of the early 1990s.

In the final step of the analysis, we examine a specific form of UI-SA interaction and find that SA participation is associated with substantially longer UI spells in New Brunswick but not British Columbia The results of this analysis suggest several important avenues for future research on the interaction between UI and SA. Firstly, it would be useful to test competing explanations for the negative impact of SA receipt on UI exit rates in New Brunswick because the alternative explanations have different policy implications. Second, it is important to understand why the results for British Columbia and New Brunswick differ; are these differences due to differences in local labour market conditions, differences in the characteristics of the welfare populations in the two jurisdictions, or differences in the welfare programs themselves?

The evidence reported here suggests that the individuals who participate in both the UI and SA programs may differ in their labour market opportunities and behaviour from those who participate in only one program. However, further research is needed to better understand the sources of these differences. Do the differences mainly emanate from the demand side of the labour market, with individuals in depressed labour markets increasingly needing to rely on both programs for income support? Or do the welfare or UI programs have a "scarring" effect on people, with the programs themselves adversely affecting beneficiaries' future labour market opportunities? Finally, are any work disincentive effects of each program exacerbated by the availability of and, in some cases, participation in both? We have begun the process of addressing these issues by providing basic summary information on the extent to which the two programs interact in practice in several Canadian provinces. We hope that this information will stimulate further research on the behavioral implications of the interaction between UI and social assistance in Canada.

Appendix A: Descriptive Statistics on Welfare Use

Table A.1
Descriptive Statistics on Welfare Use, British Columbia 1986

Variable	All Populations	Non-UI History	UI History
Female	0.39	0.42	0.35
Age	31.70	32.05	31.06
Children	0.51	0.52	0.49
Single, never married	0.55	0.54	0.57
Married	0.11	0.10	0.14
Married, separated	0.16	0.17	0.13
Divorced	0.07	0.06	0.07
Widowed	0.02	0.03	0.01
Common law	0.04	0.04	0.04
Common law, separated	0.05	0.06	0.03
Single	0.65	0.65	0.66
Couple	0.05	0.04	0.05
2 parent family	0.11	0.09	0.14
1 parent family	0.18	0.20	0.15
Other	0.01	0.02	0.00
Unable to work	0.22	0.27	0.12
Employable	0.78	0.73	0.88
UI pending	0.08	0.02	0.18
Duration	14.11	17.09	8.87
Observations	9,799	6,247	3,552
Percent of observations	100	64	36
Censored	0.04	0.06	0.02

Table A.2
Descriptive Statistics on Welfare Use, British Columbia 1989

Variable	All Populations	Non-UI History	UI History
Female	0.39	0.42	0.36
Age	31.31	32.07	30.40
Children	0.44	0.48	0.39
Single, never married	0.63	0.60	0.66
Married	0.09	0.09	0.10
Married, separated	0.13	0.14	0.10
Divorced	0.06	0.06	0.06
Widowed	0.01	0.02	0.01
Common law	0.04	0.04	0.04
Common law, separated	0.05	0.06	0.04
Single	0.69	0.67	0.72
Couple	0.04	0.05	0.04
2 parent family	0.09	0.08	0.09
1 parent family	0.17	0.18	0.14
Other	0.01	0.02	0.00
Unable to work	0.14	0.18	0.08
Employable	0.86	0.82	0.92
UI pending	0.21	0.06	0.39
Duration	9.36	11.59	6.71
Observations	11,217	6,106	5,111
Percent of observations	100	54	46
Censored	0.07	0.09	0.04

Table A.3
Descriptive Statistics on Welfare Use, British Columbia 1992

Variable	Population	Non-UI History	UI History
Female	0.38	0.40	0.36
Age	31.61	31.94	31.20
Children	0.32	0.34	0.30
Single, never married	0.55	0.53	0.57
Married	0.10	0.09	0.10
Married, separated	0.14	0.15	0.12
Divorced	0.09	0.09	0.10
Widowed	0.01	0.02	0.01
Common law	0.04	0.05	0.04
Common law, separated	0.07	0.08	0.06
Single	0.71	0.69	0.74
Couple	0.04	0.04	0.04
2 parent family	0.09	0.08	0.10
1 parent family	0.15	0.17	0.13
Other	0.01	0.02	0.00
Unable to work	0.11	0.13	0.07
Employable	0.89	0.87	0.93
UI pending	0.19	0.06	0.36
Duration	6.74	7.78	5.43
Observations	18,125	10,133	7,992
Percent of observations	100	56	44
Censored	0.28	0.35	0.20

Table A.4
Descriptive Statistics on Welfare Use, New Brunswick 1988

Variable	Population	Non-UI History	UI History
Female	0.468	0.527	0.333
Age	31.815	31.538	32.461
Family size	2.004	1.822	2.425
Single, no dependents	0.516	0.582	0.364
Single with dependents	0.252	0.255	0.246
Couple, no dependents	0.055	0.051	0.064
Couple with dependents	0.176	0.112	0.326
Less than Grade 7	0.176	0.176	0.177
Grade 7–9	0.330	0.329	0.333
Partial high school	0.199	0.202	0.193
Graduate high school	0.200	0.191	0.222
Partial/graduated post secondary	0.057	0.057	0.055
Currently attending school	0.038	0.046	0.020
Employed	0.052	0.048	0.062
Permanently disabled	0.105	0.130	0.047
Awaiting and eligible for UI	0.039	0.003	0.120
Low employability	0.236	0.268	0.160
Medium employability	0.043	0.056	0.013
High employability	0.525	0.493	0.599
Duration[1]	19.381	22.412	12.310
Right censored	0.075	0.088	0.044
Observations	1,503	1,052	451
Percent of observations	100	70	30

Notes: (1) Average duration has not been corrected for right-censoring.

Table A.5
Descriptive Statistics on Welfare Use, New Brunswick 1989

Variable	Population	Non-UI History	UI History
Female	0.503	0.561	0.411
Age	32.978	33.676	31.865
Family size	1.920	1.747	2.197
Single, no dependents	0.540	0.608	0.432
Single with dependents	0.246	0.236	0.261
Couple, no dependents	0.057	0.048	0.069
Couple with dependents	0.158	0.108	0.238
Less than Grade 7	0.151	0.171	0.120
Grade 7–9	0.318	0.293	0.359
Partial high school	0.209	0.220	0.191
Graduate high school	0.205	0.184	0.238
Partial/graduated post secondary	0.051	0.047	0.057
Currently attending school	0.062	0.085	0.036
Employed	0.059	0.050	0.072
Permanently disabled	0.102	0.138	0.044
Awaiting and eligible for UI	0.040	0.007	0.091
Low employability	0.265	0.317	0.183
Medium employability	0.043	0.044	0.041
High employability	0.491	0.443	0.569
Duration[1]	16.189	19.784	10.460
Right censored	0.122	0.158	0.065
Observations	1,647	1,012	635
Percent of observations	100	61	39

Notes: (1) Average duration has not been corrected for right-censoring.

Table A.6
Descriptive Statistics on Welfare Use, New Brunswick 1992.

Variable	Population	Non-UI History	UI History
Female	0.434	0.474	0.355
Age	32.648	32.972	32.007
Family size	1.802	1.675	2.054
Single, no dependents	0.595	0.646	0.493
Single with dependents	0.202	0.189	0.227
Couple, no dependents	0.048	0.049	0.048
Couple with dependents	0.155	0.116	0.232
Less than Grade 7	0.125	0.139	0.099
Grade 7–9	0.314	0.300	0.342
Partial high school	0.207	0.207	0.209
Graduate high school	0.205	0.183	0.250
Partial/graduated post secondary	0.084	0.086	0.082
Currently attending school	0.064	0.087	0.018
Employed	0.041	0.035	0.055
Permanently disabled	0.075	0.096	0.033
Awaiting and eligible for UI	0.038	0.099	0.093
Low employability	0.269	0.322	0.165
Medium employability	0.027	0.029	0.022
High employability	0.551	0.509	0.633
Duration[1]	9.625	11.229	6.447
Right censored	0.288	0.354	0.158
Observations	2,441	1,622	819
Percent of observations	100	66	34

Notes: (1) Average duration has not been corrected for right-censoring.

Table A.7
Descriptive Statistics on Welfare Use, Newfoundland 1990

Variable	Population	Non-UI History	UI History
Female	0.453	0.567	0.379
Age	35.688	35.094	36.070
Dependent children	0.949	0.764	1.068
Family size	2.334	2.071	2.503
Married	0.308	0.227	0.360
Widowed	0.043	0.068	0.028
Single	0.278	0.328	0.247
Separated	0.133	0.146	0.125
Divorced/deserted	0.033	0.033	0.033
Unmarried mother	0.127	0.115	0.135
Common law	0.075	0.079	0.073
Primary	0.481	0.430	0.514
Grade 9	0.143	0.133	0.149
Grade 10	0.125	0.141	0.114
Grade 11	0.130	0.141	0.122
Grade 12	0.056	0.082	0.039
Partial vocational/university	0.020	0.023	0.018
Graduate vocational/university	0.018	0.018	0.019
No formal education	0.024	0.024	0.024
Awaiting UI	0.109	0.036	0.156
Supplementing UI	0.046	0.016	0.065
Ineligible for UI	0.219	0.221	0.218
UI terminated	0.081	0.032	0.112
Employed	0.031	0.013	0.042
Unemployable, has not worked	0.014	0.024	0.008
Student	0.015	0.033	0.003
Ill or disabled	0.216	0.273	0.179
Spouse not present	0.090	0.109	0.078
Unmarried mother	0.109	0.108	0.110
Aged	0.038	0.075	0.015
Caring for dependents	0.029	0.053	0.015
Other	0.002	0.005	0.001

Table A.7 (continued)
Descriptive Statistics on Welfare Use, Newfoundland 1990

Variable	Population	Non-UI History	UI History
Managerial/Technical	0.007	0.011	0.005
Health	0.005	0.006	0.004
Arts, Recreation	0.002	—	0.003
Clerical	0.030	0.033	0.028
Sales	0.030	0.036	0.026
Service	0.127	0.133	0.123
Primary	0.101	0.033	0.145
Manufacturing	0.058	0.044	0.068
Trades	0.314	0.262	0.346
Transport	0.016	0.014	0.018
Housewife	0.090	0.131	0.064
Student	0.030	0.054	0.015
Other	0.035	0.036	0.035
No occupational history	0.154	0.208	0.120
Duration[1]	8.605	11.537	6.719
Right censored	0.076	0.110	0.054
Observations	2,386	934	1,452
Percent of observations	100	39	61

Notes: (1) Average duration has not been corrected for right censoring.

Table A.8
Descriptive Statistics on Welfare Use, Newfoundland 1991

Variable	Population	Non-UI History	UI History
Female	0.436	0.533	0.363
Age	35.583	34.700	36.247
Dependent children	0.898	0.739	1.019
Family size	2.272	2.025	2.458
Married	0.307	0.222	0.372
Widowed	0.037	0.054	0.024
Single	0.293	0.349	0.251
Separated	0.138	0.148	0.131
Divorced/deserted	0.036	0.034	0.039
Unmarried mother	0.119	0.119	0.118
Common law	0.068	0.070	0.066
Primary	0.437	0.391	0.472
Grade 9	0.137	0.140	0.135
Grade 10	0.135	0.142	0.130
Grade 11	0.150	0.165	0.139
Grade 12	0.067	0.089	0.051
Partial vocational/university	0.024	0.021	0.027
Graduate vocational/university	0.023	0.023	0.023
No formal education	0.024	0.024	0.024
Awaiting UI	0.109	0.030	0.168
Supplementing UI	0.041	0.014	0.061
Ineligible for UI	0.215	0.220	0.212
UI terminated	0.062	0.024	0.091
Employed	0.030	0.017	0.039
Unemployable, has not worked	0.016	0.032	0.004
Student	0.022	0.046	0.004
Ill or disabled	0.213	0.255	0.182
Spouse not present	0.102	0.111	0.095
Unmarried mother	0.113	0.120	0.108
Aged	0.042	0.072	0.019
Caring for dependent	0.033	0.053	0.019
Other	0.002	0.005	0.001

Table A.8 *(continued)*
Descriptive Statistics on Welfare Use, Newfoundland 1991

Variable	Population	Non-UI History	UI History
Managerial/Technical	0.006	0.010	0.003
Health	0.007	0.006	0.008
Arts, Recreation	0.002	0.001	0.003
Clerical	0.033	0.033	0.033
Sales	0.037	0.041	0.034
Service	0.119	0.122	0.117
Primary	0.097	0.042	0.139
Manufacturing	0.055	0.045	0.062
Trades	0.329	0.267	0.376
Transport	0.018	0.012	0.022
Housewife	0.085	0.117	0.061
Student	0.032	0.051	0.018
Other	0.017	0.019	0.025
No occupational history	0.153	0.223	0.100
Duration[1]	8.296	11.055	6.220
Right censored	0.118	0.179	0.072
Observations	2,460	1,056	1,404
Percent of observations	100	43	57

Notes: (1) Average duration has not been corrected for right censoring.

Table A.9
Descriptive Statistics on Welfare Use, Newfoundland 1992

Variable	Population	Non-UI History	UI History
Female	0.430	0.499	0.368
Age	34.729	33.312	35.987
Dependent children	0.804	0.592	0.993
Family size	2.162	1.857	2.432
Married	0.281	0.195	0.357
Widowed	0.034	0.049	0.022
Single	0.334	0.430	0.247
Separated	0.131	0.131	0.132
Divorced/deserted	0.035	0.036	0.033
Unmarried mother	0.110	0.082	0.135
Common law	0.074	0.075	0.073
Primary	0.377	0.337	0.413
Grade 9	0.137	0.137	0.138
Grade 10	0.133	0.137	0.130
Grade 11	0.157	0.166	0.149
Grade 12	0.108	0.137	0.082
Partial vocational/university	0.050	0.036	0.033
Graduate vocational/university	0.034	0.033	0.033
No formal education	0.017	0.014	0.019
Awaiting UI	0.089	0.023	0.149
Supplement UI	0.031	0.012	0.047
Ineligible for UI	0.280	0.312	0.252
UI terminated	0.067	0.029	0.101
Employed	0.028	0.020	0.035
Unemployable, has not worked	0.017	0.031	0.005
Student	0.024	0.043	0.007
Ill or disabled	0.195	0.246	0.150
Spouse not present	0.081	0.079	0.082
Unmarried mother	0.105	0.084	0.124
Aged	0.039	0.061	0.019
Caring for dependent	0.039	0.056	0.024
Other	0.001	0.003	0.005

Table A.9 *(continued)*
Descriptive Statistics on Welfare Use, Newfoundland 1992

Variable	Population	Non-UI History	UI History
Managerial/Technical	0.007	0.009	0.005
Health	0.008	0.008	0.007
Arts, Recreation	0.002	—	0.003
Clerical	0.041	0.037	0.045
Sales	0.035	0.034	0.037
Service	0.129	0.129	0.130
Primary	0.093	0.049	0.132
Manufacturing	0.048	0.043	0.052
Trades	0.340	0.288	0.387
Transport	0.019	0.014	0.024
Housewife	0.072	0.096	0.051
Student	0.034	0.053	0.018
Other	0.018	0.019	0.018
No occupational history	0.153	0.223	0.091
Duration[1]	6.866	8.477	5.435
Right censored	0.193	0.268	0.126
Observations	2,795	1,315	1,480
Percent of observations	100	47	43

Notes: (1) Average duration has not been corrected for right-censoring.

Table A.10
Descriptive Statistics on Welfare Use, Prince Edward Island 1991

Variable	Population	Non-UI History	UI History
Female	0.549	0.551	0.547
Age	33.466	32.341	34.814
Dependent children	0.841	0.646	1.075
Family size	2.103	1.843	2.415
Married	0.185	0.134	0.245
Common law	0.056	0.055	0.057
Widowed	0.026	0.039	0.009
Separated	0.232	0.165	0.311
Divorced	0.052	0.055	0.047
Single	0.391	0.496	0.264
Unmarried mother	0.052	0.039	0.066
Not stated	0.009	0.016	—
Physical disability	0.125	0.173	0.066
Mental disability	0.013	0.016	0.009
Emotional illness	0.034	0.039	0.028
Drug abuse	0.043	0.039	0.047
No illness or disability	0.786	0.732	0.849
Less than Grade 9	0.219	0.181	0.264
Grade 9 or 10	0.258	0.284	0.226
Grade 11 or 12	0.326	0.315	0.340
Some vocational/college	0.039	0.039	0.038
Graduated vocational/college	0.043	0.039	0.047
Some university	0.039	0.055	0.019
Graduated university	0.026	0.024	0.028
Not stated	0.052	0.063	0.038
Employed full-time	0.099	0.055	0.151
Employed part-time	0.052	0.032	0.076
Self employed	0.004	0.008	—
Seasonally employed	0.219	0.102	0.359
Temporarily exempt from seeking work	0.210	0.252	0.160
Permanently exempt from seeking work	0.090	0.142	0.028
Low employment support	0.163	0.165	0.160
Moderate employment support	0.056	0.095	0.009
High employment support	0.086	0.118	0.047
Not stated	0.022	0.032	0.009

Table A.10 *(continued)*
Descriptive Statistics on Welfare Use, Prince Edward Island 1991

Variable	Population	Non-UI History	UI History
No UI application, lack weeks worked	0.073	0.118	0.019
Refused UI, lack weeks worked	0.008	0.016	—
Refused UI, other	0.008	—	0.019
Applied and waiting for UI	0.056	0.039	0.076
Receiving UI	0.142	0.016	0.293
UI expired	—	—	—
Did not work	0.442	0.449	0.434
Not stated	0.270	0.362	0.124
Farmer	—	—	—
Fisher	0.009	—	0.019
Trade	0.086	0.063	0.113
Labourer	0.506	0.409	0.623
Houseperson	0.103	0.126	0.076
Student	0.094	0.142	0.038
Other	0.197	0.252	0.132
Not stated	0.004	0.008	—
Duration[1]	12.494	13.882	10.830
Right censored	0.305	0.354	0.245
Observations	233	127	106
Percent of observations	100	55	45

Notes: (1) Average duration has not been corrected for right-censoring.

Table A.11
Descriptive Statistics on Welfare Use, Prince Edward Island 1992

Variable	Population	Non-UI History	UI History
Female	0.409	0.498	0.337
Age	34.445	34.662	34.270
Dependent children	0.815	0.614	0.0977
Family size	2.100	1.783	2.356
Married	0.222	0.132	0.295
Common law	0.065	0.044	0.081
Widowed	0.032	0.056	0.013
Separated	0.197	0.205	0.191
Divorced	0.075	0.108	0.049
Single	0.367	0.414	0.330
Unmarried mother	0.039	0.036	0.041
Not stated	0.002	0.004	—
Physical disability	0.088	0.133	0.052
Mental disability	0.009	0.016	0.003
Emotional illness	0.022	0.028	0.016
Drug abuse	0.047	0.048	0.045
No illness or disability	0.835	0.775	0.884
Less than Grade 9	0.235	0.209	0.256
Grade 9 or 10	0.255	0.249	0.259
Grade 11 or 12	0.280	0.257	0.298
Some vocational/college	0.072	0.092	0.055
Graduated vocational/college	0.052	0.048	0.055
Some university	0.048	0.056	0.042
Graduated university	0.007	0.008	0.007
Not stated	0.052	0.080	0.029
Employed full-time	0.086	0.096	0.077
Employed part-time	0.050	0.052	0.049
Self employed	0.009	0.012	0.007
Seasonally employed	0.308	0.141	0.443
Temporarily exempt from seeking work	0.136	0.185	0.097
Permanently exempt from seeking work	0.070	0.153	0.003
Low employment support	0.156	0.133	0.175
Moderate employment support	0.125	0.153	0.104
High employment support	0.050	0.060	0.042
Not stated	0.009	0.016	0.003

Table A.11 *(continued)*
Descriptive Statistics on Welfare Use, Prince Edward Island 1992

Variable	Population	Non-UI History	UI History
No UI application, lack weeks worked	0.079	0.072	0.084
Refused UI, lack weeks worked	0.009	0.012	0.007
Refused UI, other	0.005	0.008	0.003
Applied and waiting for UI	0.102	0.032	0.159
Receiving UI	0.170	0.048	0.269
UI expired	0.075	0.040	0.104
Did not work	0.378	0.562	0.230
Not stated	0.181	0.225	0.146
Farmer	0.005	0.008	0.003
Fisher	0.036	0.012	0.055
Trade	0.081	0.072	0.087
Labourer	0.512	0.382	0.618
Houseperson	0.079	0.121	0.045
Student	0.077	0.125	0.039
Other	0.204	0.273	0.149
Not stated	0.054	0.008	0.003
Duration[1]	7.109	8.470	5.071
Right censored	0.235	0.317	0.168
Observations	558	249	309
Percent of observations	100	45	55

Notes: (1) Average duration has not been corrected for right-censoring.

Table A-12
Descriptive Statistics on Welfare Use, Alberta 1991

Variable	Population	Non-UI History	UI History
Female	0.446	0.478	0.378
Age	31.124	30.619	32.133
Dependent children	0.713	0.719	0.675
Family size	2.018	2.016	1.991
Head of household	0.858	0.840	0.890
Single, no dependents	0.528	0.531	0.521
Single, with dependents	0.168	0.172	0.159
Couple, no dependents	0.094	0.096	0.089
Couple, with dependents	0.211	0.200	0.231
60 years or older	0.018	0.022	0.010
Single parent	0.162	0.167	0.152
Physical disability	0.098	0.098	0.097
Mental disability	0.014	0.016	0.009
Employable	0.695	0.681	0.723
Unable to work	0.014	0.017	0.009
Duration[1]	7.425	8.129	6.072
Right censored	0.134	0.157	0.091
Observations	10,606	6,980	3,626
Percent of observations	100	66	34

Notes: (1) Average duration has not been corrected for right censoring.

Table A.13
Descriptive Statistics on Welfare Use, Alberta 1992

Variable	Population	Non-UI History	UI History
Female	0.440	0.470	0.375
Age	31.368	31.058	32.033
Dependent children	0.698	0.710	0.673
Family size	2.000	2.005	1.991
Head of household	0.849	0.832	0.884
Single, no dependents	0.541	0.541	0.540
Single, with dependents	0.157	0.164	0.142
Couple, no dependents	0.092	0.092	0.090
Couple, with dependents	0.211	0.203	0.228
60 years or older	0.019	0.024	0.010
Single parent	0.141	0.149	0.125
Physical disability	0.093	0.096	0.087
Mental disability	0.015	0.017	0.009
Employable	0.717	0.698	0.758
Unable to work	0.015	0.017	0.011
Duration[1]	5.069	5.450	4.253
Right censored	0.351	0.390	0.267
Observations	13,163	8,977	4,186
Percent of observations	100	68	32

Notes: (1) Average duration has not been corrected for right censoring.

Table A.14
Descriptive Statistics on Welfare Use by Spell Duration, British Columbia 1986

Variable	All	D1–3	D4–6	D7–9	D10–12	D13–18	D19+
Female	0.39	0.35	0.36	0.33	0.33	0.35	0.54
Age	31.70	31.44	30.33	31.11	31.00	31.56	33.69
Children	0.51	0.48	0.44	0.47	0.47	0.49	0.66
Single, never married	0.55	0.57	0.59	0.59	0.55	0.57	0.47
Married	0.11	0.14	0.11	0.10	0.10	0.11	0.09
Married, separated	0.16	0.13	0.16	0.14	0.14	0.15	0.22
Divorced	0.07	0.06	0.07	0.07	0.08	0.07	0.08
Widow	0.02	0.02	0.01	0.01	0.02	0.01	0.04
Common law	0.04	0.04	0.03	0.04	0.05	0.05	0.03
Common law, separated	0.05	0.03	0.04	0.06	0.06	0.05	0.08
Single	0.65	0.67	0.69	0.68	0.68	0.66	0.57
Couple	0.05	0.05	0.05	0.03	0.05	0.04	0.04
2 parent family	0.11	0.13	0.10	0.11	0.10	0.12	0.06
1 parent family	0.18	0.14	0.15	0.16	0.15	0.17	0.30
Other	0.01	0.01	0.01	0.02	0.01	0.01	0.03
Unable to work	0.22	0.16	0.17	0.16	0.16	0.20	0.38
Employable	0.78	0.84	0.83	0.84	0.84	0.80	0.62
UI history	0.36	0.50	0.39	0.34	0.27	0.24	0.20
UI pending	0.08	0.16	0.06	0.03	0.02	0.02	0.02
Duration	14.11	1.74	4.88	7.87	10.92	15.16	45.64
Observations	9,799	3,599	1,471	1,007	768	862	2,092
Percent of observations	100	37	15	10	1	1	21
Censored	0.04	0.00	0.00	0.00	0.00	0.00	0.20

Table A.15
Descriptive Statistics on Welfare Use by Spell Duration, British Columbia 1989

Variable	All	D1–3	D4–6	D7–9	D10–12	D13–18	D19+
Female	0.39	0.34	0.35	0.39	0.44	0.43	0.58
Age	31.31	30.71	30.81	31.89	31.27	31.68	33.50
Children	0.44	0.38	0.39	0.45	0.56	0.52	0.62
Single, never married	0.63	0.66	0.64	0.60	0.60	0.57	0.54
Married	0.09	0.10	0.08	0.09	0.07	0.07	0.07
Married, separated	0.13	0.11	0.12	0.14	0.17	0.14	0.18
Divorced	0.06	0.05	0.06	0.08	0.06	0.08	0.08
Widow	0.01	0.01	0.01	0.01	0.01	0.01	0.02
Common law	0.04	0.04	0.04	0.04	0.04	0.06	0.03
Common law, separated	0.05	0.03	0.05	0.05	0.05	0.07	0.09
Single	0.69	0.73	0.72	0.69	0.63	0.66	0.55
Couple	0.04	0.05	0.04	0.04	0.04	0.04	0.04
2 parent family	0.09	0.10	0.08	0.08	0.08	0.07	0.06
1 parent family	0.17	0.12	0.15	0.17	0.23	0.22	0.31
Other	0.01	0.00	0.01	0.01	0.02	0.01	0.04
Unable to work	0.14	0.09	0.12	0.13	0.15	0.16	0.33
Employable	0.86	0.91	0.88	0.87	0.85	0.84	0.67
UI history	0.46	0.56	0.44	0.38	0.33	0.31	0.28
UI pending	0.21	0.33	0.14	0.08	0.06	0.07	0.06
Duration	9.36	1.82	4.85	7.89	10.95	15.09	39.37
Observations	11,217	5,348	2,035	1,057	627	595	1,555
Percent of observations	100	48	18	9	6	5	14
Censored	0.07	0.00	0.00	0.00	0.00	0.00	0.49

Table A.16
Descriptive Statistics on Welfare Use by Spell Duration, British Columbia 1992

Variable	All	D1–3	D4–6	D7–9	D10–12	D13–18	D19+
Female	0.38	0.35	0.35	0.35	0.42	0.47	0.51
Age	31.61	31.35	31.18	31.60	32.40	31.96	33.05
Children	0.32	0.28	0.29	0.33	0.47	0.31	0.57
Single, never married	0.55	0.58	0.55	0.56	0.48	0.51	0.50
Married	0.10	0.12	0.09	0.09	0.08	0.07	0.07
Married, separated	0.14	0.11	0.14	0.13	0.18	0.17	0.19
Divorced	0.09	0.08	0.10	0.10	0.10	0.10	0.09
Widow	0.01	0.01	0.01	0.01	0.01	0.01	0.02
Common law	0.04	0.05	0.04	0.04	0.04	0.04	0.03
Common law, separated	0.07	0.05	0.06	0.07	0.10	0.10	0.11
Single	0.71	0.75	0.74	0.72	0.65	0.63	0.61
Couple	0.04	0.05	0.04	0.03	0.04	0.03	0.03
2 parent family	0.09	0.11	0.09	0.08	0.08	0.07	0.06
1 parent family	0.15	0.09	0.13	0.16	0.22	0.25	0.28
Other	0.01	0.00	0.00	0.01	0.01	0.02	0.02
Unable to work	0.11	0.08	0.09	0.11	0.13	0.16	0.21
Employable	0.89	0.92	0.91	0.89	0.87	0.84	0.79
UI history	0.44	0.54	0.49	0.37	0.32	0.30	0.22
UI pending	0.19	0.31	0.17	0.10	0.09	0.06	0.06
Duration	6.74	1.92	4.84	8.08	10.97	15.15	19.46
Observations	18,125	7,407	3,239	2,081	2,087	2,742	569
Percent of observations	100	41	18	11	12	15	3
Censored	0.28	0.00	0.00	0.28	0.72	0.89	1.00

Table A.17
Descriptive Statistics on Welfare Use by Spell Duration, New Brunswick 1986

Variable	Population	D1–3	D4–6	D7–9	D10–12	D13–18	D19+
Female	0.47	0.36	0.44	0.44	0.42	0.52	0.57
Age	31.815	31.356	30.384	31.388	32.816	30.919	33.110
Family size	2.004	2.131	1.974	2.044	2.040	1.822	1.924
Single,no dependents	0.516	0.496	0.520	0.531	0.496	0.597	0.511
Single, dependents	0.252	0.195	0.266	0.225	0.208	0.250	0.322
Couple, no dependents	0.055	0.057	0.052	0.050	0.096	0.048	0.047
Couple, dependents	0.176	0.252	0.162	0.194	0.200	0.105	0.119
Less Grade 7	0.176	0.143	0.127	0.106	0.200	0.218	0.241
Grade 7–9	0.330	0.316	0.314	0.369	0.304	0.290	0.356
Partial high school	0.199	0.219	0.188	0.188	0.192	0.226	0.185
Graduated high school	0.200	0.223	0.271	0.231	0.168	0.218	0.142
Partial/graduated post secondary	0.057	0.071	0.052	0.075	0.064	0.032	0.043
Currently at school	0.038	0.029	0.043	0.093	0.072	0.016	0.034
Employed	0.052	0.031	0.109	0.056	0.008	0.065	0.050
Permanent disability	0.105	0.036	0.087	0.094	0.120	0.097	0.182
Awaiting and eligible for UI	0.039	0.086	0.039	0.025	0.008	0.024	0.011
Low employability	0.236	0.188	0.140	0.238	0.264	0.299	0.304
Medium employability	0.043	0.036	0.039	0.031	0.032	0.057	0.056
High employability	0.525	0.625	0.585	0.550	0.568	0.460	0.396
UI history	0.300	0.466	0.341	0.281	0.280	0.153	0.176
Duration[1]	19.381	1.796	4.856	8.019	11.064	15.210	51.146
Right censored	0.075	—	—	—	—	—	0.255
Observations	1,503	421	229	160	125	124	444
Sample percent	100	28	15	11	8	8	30

Notes: (1) Average duration has not been corrected for right censoring.

Table A.18
Descriptive Statistics on Welfare Use by Spell Duration, New Brunswick 1989

Variable	Population	D1–3	D4–6	D7–9	D10–12	D13–18	D19+
Female	0.50	0.43	0.44	0.53	0.54	0.55	0.58
Age	32.978	31.443	33.178	31.442	37.252	33.376	33.771
Family size	1.920	2.015	1.809	1.879	1.832	1.960	1.915
Single, no dependents	0.540	0.523	0.607	0.523	0.550	0.544	0.524
Single, dependents	0.246	0.193	0.207	0.300	0.199	0.248	0.310
Couple, no dependents	0.057	0.061	0.057	0.056	0.099	0.048	0.043
Couple, dependents	0.158	0.223	0.130	0.122	0.153	0.160	0.123
Less than Grade 7	0.151	0.120	0.142	0.117	0.145	0.160	0.202
Grade 7–9	0.318	0.328	0.344	0.294	0.290	0.288	0.321
Partial high school	0.209	0.204	0.215	0.239	0.214	0.208	0.198
Graduated high school	0.205	0.246	0.198	0.203	0.214	0.208	0.164
Partial/graduated post secondary	0.051	0.059	0.057	0.051	0.038	0.056	0.042
Currently at school	0.062	0.044	0.045	0.097	0.099	0.080	0.074
Employed	0.059	0.044	0.065	0.086	0.076	0.040	0.059
Permanently disabled	0.102	0.061	0.073	0.071	0.168	0.120	0.149
Awaiting and eligible for UI	0.040	0.105	0.020	0.015	0.015	0.016	0.006
Low employability	0.265	0.198	0.283	0.223	0.275	0.352	0.316
Medium employability	0.043	0.046	0.041	0.031	0.023	0.040	0.051
High employability	0.491	0.546	0.518	0.574	0.435	0.432	0.418
UI history	0.390	0.609	0.417	0.355	0.244	0.280	0.223
Duration[1]	16.189	1.838	4.879	7.909	10.870	15.144	41.843
Right censored	0.122	—	—	—	—	—	0.427
Observations	1,647	476	247	197	131	125	471
Sample percent	100	29	15	12	8	8	28

Notes: (1) Average duration has not been corrected for right censoring.

Table A.19
Descriptive Statistics on Welfare Use by Spell Duration, New Brunswick 1992

Variable	Population	D1–3	D4–6	D7–9	D10–12	D13–18	D19+
Female	0.434	0.384	0.384	0.384	0.451	0.507	0.527
Age	32.648	32.837	32.725	32.364	31.721	32.458	35.370
Family size	1.802	1.952	1.830	1.706	1.558	1.765	1.775
Single, no dependents	0.595	0.572	0.590	0.674	0.676	0.576	0.562
Single, dependents	0.202	0.158	0.151	0.161	0.176	0.270	0.281
Couple, no dependents	0.048	0.045	0.079	0.033	0.057	0.035	0.047
Couple, dependents	0.155	0.226	0.180	0.132	0.090	0.118	0.110
Less Grade 7	0.125	0.104	0.085	0.116	0.107	0.171	0.157
Grade 7–9	0.314	0.300	0.352	0.289	0.340	0.291	0.334
Partial high school	0.207	0.217	0.230	0.219	0.180	0.201	0.183
Graduated high school	0.205	0.242	0.183	0.215	0.189	0.191	0.186
Partial/graduated post secondary	0.084	0.104	0.090	0.078	0.082	0.065	0.077
Currently at school	0.064	0.033	0.061	0.083	0.103	0.080	0.062
Employed	0.041	0.030	0.050	0.041	0.053	0.039	0.050
Permanent disability	0.075	0.036	0.053	0.062	0.086	0.101	0.133
Awaiting and eligible for UI	0.038	0.079	0.037	0.017	0.012	0.016	0.027
Low employability	0.269	0.174	0.246	0.261	0.291	0.329	0.376
Medium employability	0.027	0.018	0.027	0.029	0.021	0.037	0.030
High employability	0.551	0.664	0.587	0.591	0.537	0.479	0.385
UI history	0.336	0.571	0.365	0.298	0.221	0.226	0.127
Duration[1]	9.625	1.880	4.831	7.971	10.951	15.288	21.157
Right censored	0.288	—	—	—	—	0.708	0.893
Observations	2,441	673	378	242	244	566	338
Sample percent	100	28	16	10	10	23	14

Notes: (1) Average duration has not been corrected for right-censoring.

Table A.20
Summary Statistics on UI Claims in British Columbia, 1986

Variable	Population	UI Only	Concurrent UI-Welfare	Subsequent UI-Welfare
Female	0.43	0.43	0.36	0.36
Age	34.168	34.508	29.388	29.264
Claim duration	38.291	37.797	47.515	36.378
Weeks paid	25.732	25.243	34.764	24.213
Weeks disqualified/disentitled	0.424	0.397	0.814	0.778
Benefit rate	207.471	209.989	173.789	164.796
Insured weeks	34.484	34.785	29.639	32.649
Insured earnings	6,617.226	6,763.944	5,419.520	5,296.769
Developmental uses	0.062	0.061	0.079	0.078
Training	0.047	0.046	0.056	0.054
Regular	0.864	0.862	0.888	0.853
Sickness	0.034	0.035	0.010	0.078
Fishing	0.020	0.020	0.020	0.006
Maternity/Parental	0.032	0.034	—	0.015
Retirement	0.011	0.012	—	—
Adult Occupational Training Act	0.034	0.036	0.083	0.048
Not terminated	0.013	0.012	0.032	0.018
Lapsed	0.486	0.495	0.300	0.562
Exhausted	0.075	0.074	0.108	0.033
Externally terminated	0.026	0.025	0.052	0.033
Terminated at 52 weeks	0.400	0.395	0.519	0.354
Managerial	0.149	0.152	0.087	0.078
Clerical	0.172	0.175	0.135	0.117
Sales	0.067	0.067	0.068	0.075
Services	0.142	0.135	0.229	0.264
Primary	0.093	0.093	0.100	0.081
Processing, Machine Operators	0.254	0.254	0.243	0.246
Transport	0.047	0.047	0.046	0.039
Material handling	0.029	0.028	0.041	0.033
Not elsewhere classified	0.047	0.046	0.052	0.066
Agriculture	0.087	0.047	0.084	0.066
Mining	0.089	0.087	0.081	0.039
Manufacture	0.327	0.324	0.362	0.402
Construction	0.047	0.048	0.032	0.027
Communication	0.005	0.004	0.007	0.003
Wholesale	0.161	0.162	0.137	0.156
Retail	0.095	0.096	0.083	0.105
F.I.R.E.	0.076	0.077	0.058	0.061
Public Administration	0.021	0.022	0.017	0.012
Services	0.067	0.065	0.093	0.078
Missing	0.026	0.026	0.049	0.030
Observations	24,777	23,136	1,308	333
Sample percent	100	93	5	1

Table A.21
Summary Statistics on UI Claims in British Columbia, 1989

Variable	Population	UI Only	Concurrent UI-Welfare	Subsequent UI-Welfare
Female	0.47	0.48	0.36	0.45
Age	35.063	35.642	29.950	28.757
Claim duration	35.863	35.266	44.773	26.027
Weeks paid	23.873	23.242	32.534	16.854
Weeks disqualified/disentitled	0.500	0.447	1.042	0.762
Benefit rate	245.441	249.628	208.502	199.864
Insured weeks	35.748	36.156	31.439	34.485
Insured earnings	7,912.531	8,056.125	6,608.580	6,515.066
Developmental uses	0.065	0.063	0.096	0.044
Training	0.057	0.059	0.071	0.027
Regular	0.880	0.873	0.962	0.864
Sickness	0.051	0.053	0.013	0.102
Fishing	0.023	0.023	0.022	0.005
Maternity/Parental	0.036	0.040	0.003	0.029
Retirement	0.010	0.011	—	—
Not terminated	0.001	0.007	0.011	0.010
Lapsed	0.537	0.548	0.358	0.794
Exhausted	0.175	0.167	0.286	0.061
Externally terminated	0.004	0.004	0.003	0.002
Terminated at 52 weeks	0.278	0.275	0.342	0.134
Managerial	0.149	0.156	0.084	0.112
Clerical	0.175	0.180	0.127	0.172
Sales	0.064	0.064	0.067	0.056
Services	0.125	0.118	0.183	0.194
Primary	0.116	0.118	0.106	0.070
Processing, Machine Operators	0.239	0.235	0.276	0.231
Transport	0.041	0.041	0.046	0.041
Material Handling	0.026	0.026	0.029	0.027
Not elsewhere classified	0.064	0.062	0.083	0.097
Agriculture	0.144	0.146	0.123	0.117
Mining	0.014	0.014	0.014	0.005
Manufacture	0.139	0.140	0.138	0.104
Construction	0.100	0.098	0.119	0.107
Transport	0.038	0.039	0.034	0.034
Communication	0.018	0.018	0.015	0.024
Wholesale	0.037	0.037	0.040	0.053
Retail	0.091	0.089	0.107	0.112
F.I.R.E.	0.088	0.090	0.076	0.061
Public Administration	0.050	0.052	0.031	0.039
Services	0.257	0.255	0.266	0.323
Missing	0.023	0.021	0.039	0.002
Observations	23,051	20,791	1,848	412
Sample percent	100	90	8	2

Table A.22
Summary Statistics on UI Claims in British Columbia, 1992

Variable	Population	UI Only	Concurrent UI-Welfare	Subsequent UI-Welfare
Female	0.44	0.45	0.35	0.46
Age	35.883	36.373	30.877	29.548
Claim duration	44.887	44.540	48.021	33.318
Weeks paid	24.337	23.706	28.630	19.216
Weeks disqualified/disentitled	0.589	0.441	1.443	1.137
Benefit rate	285.483	292.544	247.585	226.921
Insured weeks	36.241	36.666	33.676	36.000
Insured earnings	9,221.061	9,457.661	7,946.874	7,307.192
Developmental uses	0.154	0.152	0.166	0.160
Training	0.101	0.099	0.111	0.114
Regular	0.883	0.877	0.925	0.802
Sickness	0.055	0.054	0.046	0.143
Fishing	0.022	0.023	0.014	0.029
Maternity/Parental	0.039	0.045	0.014	0.026
Not terminated	0.428	0.429	0.444	0.175
Lapsed	0.209	0.221	0.109	0.542
Exhausted	0.209	0.195	0.298	0.149
Externally terminated	0.002	0.022	—	0.003
Terminated at 52 weeks	0.152	0.153	0.150	0.131
Managerial	0.243	0.210	0.177	0.198
Clerical	0.048	0.037	0.028	0.032
Sales	0.019	0.012	0.019	0.023
Services	0.212	0.179	0.270	0.335
Primary	0.243	0.331	0.287	0.198
Processing, Machine Operators	0.119	0.122	0.103	0.087
Transport	0.005	0.005	0.003	0.003
Material Handling	0.034	0.034	0.032	0.026
Not elsewhere classified	0.076	0.075	0.080	0.096
Agriculture	0.084	0.088	0.061	0.038
Mining	0.011	0.012	0.006	0.003
Manufacture	0.147	0.152	0.121	0.140
Construction	0.124	0.121	0.144	0.082
Transport	0.033	0.031	0.040	0.029
Communication	0.012	0.012	0.010	0.006
Wholesale	0.047	0.046	0.051	0.061
Retail	0.102	0.097	0.124	0.184
F.I.R.E.	0.089	0.091	0.080	0.055
Public Administration	0.053	0.056	0.034	0.032
Services	0.244	0.242	0.252	0.318
Missing	0.054	0.051	0.074	0.052
Observations	28,110	23,853	3,914	343
Sample percent	100	85	14	1

Table A.23
Summary Statistics on UI Claims in New Brunswick, 1986

Variable	Population	UI Only	Concurrent UI-Welfare	Subsequent UI-Welfare
Female	0.39	0.39	0.32	0.37
Age	33.524	33.589	32.785	29.953
Claim duration	40.818	40.588	45.754	44.581
Weeks paid	28.528	28.199	35.255	35.151
Weeks disqualified/disentitled	0.222	0.216	0.402	0.175
Benefit rate	191.416	192.504	168.685	171.314
Insured weeks	25.931	26.186	21.393	18.337
Insured earnings	5,328.048	5,377.028	4,409.340	4,032.244
Developmental uses	0.057	0.057	0.044	0.081
Training	0.037	0.038	0.028	0.023
Regular	0.880	0.880	0.891	0.837
Sickness	0.027	0.027	0.003	0.023
Fishing	0.031	0.030	0.025	0.070
Maternity/Parental	0.021	0.022	0.006	—
Retirement	0.006	0.006	—	—
Adult Occupational Training Act	0.037	0.035	0.075	0.070
Not terminated	0.018	0.018	0.028	0.023
Lapsed	0.371	0.378	0.240	0.221
Exhausted	0.246	0.241	0.327	0.419
Externally terminated	0.058	0.059	0.053	0.035
Terminated at 52 weeks	0.305	0.303	0.352	0.302
Managerial	0.092	0.095	0.019	0.035
Clerical	0.133	0.135	0.097	0.093
Sales	0.048	0.048	0.031	0.025
Services	0.112	0.110	0.153	0.128
Primary	0.094	0.092	0.131	0.140
Processing, Machine Operators	0.414	0.412	0.458	0.488
Transport	0.048	0.048	0.047	0.012
Material Handling	0.025	0.025	0.025	0.012
Not elsewhere classified	0.034	0.033	0.040	0.058
Agriculture	0.115	0.114	0.128	0.153
Mining	0.013	0.013	0.013	0.024
Manufacture	0.226	0.228	0.150	0.271
Construction	0.130	0.130	0.128	0.106
Transport	0.024	0.024	0.034	0.012
Communication	0.009	0.010	0.009	—
Wholesale	0.033	0.032	0.044	0.035
Retail	0.093	0.094	0.091	0.082
F.I.R.E.	0.051	0.052	0.047	0.035
Public Administration	0.114	0.115	0.106	0.059
Services	0.183	0.185	0.244	0.212
Missing	0.008	0.008	0.006	0.012
Observations	8,703	8,296	321	86
Sample percent	100	95	4	1

Table A.24
Summary Statistics on UI Claims in New Brunswick, 1989

Variable	Population	UI Only	Concurrent UI-Welfare	Subsequent UI-Welfare
Female	0.42	0.42	0.43	0.33
Age	34.354	34.463	32.490	31.487
Claim duration	40.630	40.336	46.624	43.154
Weeks paid	28.370	28.000	35.759	32.256
Weeks disqualified/disentitled	0.270	0.254	0.551	0.551
Benefit rate	227.940	230.537	178.832	185.731
Insured weeks	27.199	27.468	22.683	19.756
Insured earnings	6,508.842	6,591.908	4,972.849	4,973.654
Developmental uses	0.071	0.069	0.112	0.077
Training	0.057	0.056	0.085	0.077
Regular	0.917	0.914	0.968	0.923
Sickness	0.030	0.030	0.012	0.013
Fishing	0.025	0.025	0.017	0.064
Maternity/Parental	0.024	0.025	0.002	—
Retirement	0.004	0.004	—	—
Not terminated	0.012	0.012	0.015	0.026
Lapsed	0.473	0.481	0.320	0.359
Exhausted	0.218	0.215	0.266	0.308
Externally terminated	0.002	0.002	0.005	0.026
Terminated at 52 weeks	0.294	0.290	0.395	0.282
Managerial	0.106	0.109	0.056	0.051
Clerical	0.139	0.141	0.100	0.141
Sales	0.049	0.050	0.037	0.026
Services	0.110	0.106	0.168	0.192
Primary	0.101	0.100	0.110	0.192
Processing, Machine Operators	0.384	0.384	0.402	0.308
Transport	0.050	0.050	0.039	0.038
Material Handling	0.025	0.025	0.032	—
Not elsewhere classified	0.036	0.035	0.056	0.051
Agriculture	0.130	0.131	0.098	0.192
Mining	0.012	0.012	0.010	0.026
Manufacture	0.192	0.194	0.163	0.141
Construction	0.137	0.139	0.102	0.051
Transport	0.026	0.026	0.034	0.013
Communication	0.009	0.009	0.002	—
Wholesale	0.034	0.035	0.029	—
Retail	0.093	0.094	0.076	0.090
F.I.R.E	0.054	0.053	0.061	0.038
Public Administration	0.111	0.108	0.173	0.192
Services	0.183	0.182	0.217	0.218
Missing	0.018	0.017	0.034	0.038
Observations	9,511	9,023	410	78
Sample percent	100	95	4	1

Table A.25
Summary Statistics on UI Claims in New Brunswick, 1992

Variable	Population	UI Only	Concurrent UI-Welfare	Subsequent UI-Welfare
Female	0.42	0.42	0.43	0.35
Age	35.721	35.939	32.917	31.235
Claim duration	46.777	46.687	47.954	48.508
Weeks paid	28.557	28.182	33.692	34.773
Weeks disqualified/disentitled	0.252	0.215	0.798	0.735
Benefit rate	259.773	264.362	195.051	192.045
Insured weeks	26.676	26.981	23.023	19.197
Insured earnings	7,352.383	7,499.835	5,321.333	4,953.909
Developmental uses	0.137	0.135	0.167	0.197
Training	0.074	0.074	0.065	0.068
Regular	0.925	0.923	0.954	0.970
Sickness	0.033	0.033	0.032	—
Fishing	0.023	0.023	0.008	0.030
Maternity/Parental	0.019	0.020	0.007	—
Not terminated	0.395	0.398	0.362	0.341
Lapsed	0.192	0.198	0.104	0.081
Exhausted	0.246	0.236	0.375	0.471
Externally terminated	0.002	0.002	0.005	0.001
Terminated at 52 weeks	0.165	0.166	0.154	0.106
Managerial	0.205	0.210	0.136	0.098
Clerical	0.036	0.037	0.022	0.038
Sales	0.012	0.012	0.005	—
Services	0.185	0.179	0.279	0.174
Primary	0.333	0.331	0.362	0.379
Processing, Machine Operators	0.096	0.098	0.069	0.091
Transport	0.005	0.005	—	—
Material Handling	0.081	0.081	0.071	0.091
Not elsewhere classified	0.048	0.046	0.056	0.121
Agriculture	0.099	0.101	0.070	0.076
Mining	0.013	0.013	0.007	—
Manufacture	0.184	0.187	0.153	0.150
Construction	0.136	0.138	0.106	0.136
Transport	0.030	0.030	0.027	0.038
Communication	0.018	0.015	0.065	0.068
Wholesale	0.039	0.041	0.018	—
Retail	0.097	0.098	0.090	0.045
F.I.R.E.	0.049	0.050	0.030	0.045
Public Administration	0.120	0.118	0.156	0.159
Services	0.177	0.174	0.234	0.189
Missing	0.036	0.035	0.046	0.083
Observations	11,188	10,453	603	132
Sample percent	100	93	5	1

Table A.28
Summary Statistics on UI Claims in Newfoundland, 1990

Variable	Population	UI Only	Concurrent UI-Welfare	Subsequent UI-Welfare
Female	0.41	0.41	0.38	0.37
Age	34.852	34.825	34.694	36.130
Claim duration	43.364	43.143	47.462	44.470
Weeks paid	33.551	33.061	40.436	39.775
Weeks disqualified/disentitled	0.223	0.224	0.312	0.035
Benefit rate	242.495	246.490	191.509	182.835
Insured weeks	24.945	25.463	19.361	15.420
Insured earnings	7,016.020	7,180.525	5,008.159	4,401.290
Developmental uses	0.065	0.065	0.072	0.055
Training	0.076	0.078	0.040	0.045
Regular	0.894	0.894	0.934	0.810
Sickness	0.012	0.012	0.003	0.005
Fishing	0.075	0.073	0.064	0.185
Maternity/Parental	0.017	0.019	—	—
Not terminated	0.010	0.009	0.023	0.010
Lapsed	0.464	0.480	0.249	0.255
Exhausted	0.209	0.191	0.396	0.550
Externally terminated	0.007	0.007	0.012	0.010
Terminated at 52 weeks	0.310	0.314	0.321	0.175
Managerial	0.091	0.095	0.049	0.035
Clerical	0.152	0.154	0.130	0.110
Sales	0.048	0.050	0.023	0.015
Services	0.108	0.105	0.150	0.160
Primary	0.087	0.084	0.090	0.190
Processing, Machine Operators	0.450	0.446	0.523	0.470
Transport	0.041	0.042	0.017	0.015
Material Handling	0.019	0.020	0.014	0.005
Not elsewhere classified	0.004	0.004	0.003	—
Agriculture	0.072	0.073	0.070	0.040
Mining	0.005	0.005	0.007	—
Manufacture	0.168	0.171	0.153	0.145
Construction	0.125	0.129	0.106	0.050
Transport	0.035	0.036	0.027	0.010
Communication	0.010	0.011	0.065	—
Wholesale	0.043	0.044	0.018	0.045
Retail	0.102	0.106	0.090	0.035
F.I.R.E.	0.080	0.084	0.030	0.040
Public Administration	0.132	0.108	0.156	0.555
Services	0.195	0.199	0.234	0.070
Missing	0.033	0.031	0.046	0.010
Observations	7,948	7,402	346	200
Sample percent	100	93	4	3

Table A.27
Summary Statistics on UI Claims in Newfoundland, 1991

Variable	Population	UI Only	Concurrent UI-Welfare	Subsequent UI-Welfare
Female	0.42	0.42	0.38	0.37
Age	35.352	35.298	35.508	37.413
Claim duration	43.578	43.649	43.454	40.668
Weeks paid	33.571	33.264	37.840	37.092
Weeks disqualified/disentitled	0.197	0.195	0.281	0.098
Benefit rate	255.420	260.143	198.791	179.853
Insured weeks	22.718	23.257	16.600	13.261
Insured earnings	6,718.750	6,906.596	4,526.658	3,569.516
Developmental uses	0.117	0.119	0.101	0.103
Training	0.056	0.058	0.038	0.011
Regular	0.887	0.888	0.885	0.832
Sickness	0.016	0.016	0.013	—
Fishing	0.080	0.078	0.090	0.168
Maternity/Parental	0.017	0.018	0.002	—
Not terminated	0.028	0.029	0.016	0.011
Lapsed	0.313	0.326	0.182	0.060
Exhausted	0.399	0.374	0.685	0.832
Externally terminated	0.005	0.005	0.009	0.010
Terminated at 52 weeks	0.254	0.265	0.108	0.087
Managerial	0.106	0.111	0.043	0.043
Clerical	0.129	0.130	0.115	0.147
Sales	0.038	0.040	0.016	0.011
Services	0.121	0.120	0.144	0.130
Primary	0.191	0.190	0.187	0.217
Processing, Machine Operators	0.345	0.338	0.443	0.413
Transport	0.035	0.035	0.038	0.011
Material Handling	0.032	0.033	0.016	0.022
Not elsewhere classified	0.003	0.003	—	0.005
Agriculture	0.075	0.076	0.061	0.038
Mining	0.005	0.005	0.002	—
Manufacture	0.174	0.177	0.128	0.136
Construction	0.122	0.126	0.094	0.022
Transport	0.039	0.040	0.022	0.011
Communication	0.009	0.010	0.002	—
Wholesale	0.041	0.043	0.022	0.027
Retail	0.104	0.109	0.054	0.038
F.I.R.E.	0.080	0.084	0.027	0.027
Public Administration	0.135	0.109	0.420	0.614
Services	0.190	0.195	0.144	0.076
Missing	0.026	0.027	0.022	0.011
Observations	9,807	8,275	456	184
Sample percent	100	93	5	2

Table A.23
Summary Statistics on UI Claims in Newfoundland, 1992

Variable	Population	UI Only	Concurrent UI-Welfare	Subsequent UI-Welfare
Female	0.595	0.593	0.614	0.637
Age	35.593	35.583	35.506	36.156
Claim duration	46.580	46.712	45.484	43.933
Weeks paid	32.058	31.638	37.687	35.863
Weeks disqualified/disentitled	0.160	0.149	0.394	0.056
Benefit rate	261.057	267.313	188.182	180.581
Insured weeks	22.307	22.847	16.935	13.407
Insured earnings	6,798.602	7,027.168	4,220.582	3,675.841
Developmental uses	0.125	0.126	0.107	0.126
Training	0.065	0.067	0.046	0.048
Regular	0.917	0.916	0.936	0.919
Sickness	0.018	0.018	0.016	0.004
Fishing	0.054	0.054	0.046	0.074
Maternity/Parental	0.011	0.012	0.002	0.004
Not terminated	0.343	0.354	0.203	0.226
Lapsed	0.186	0.196	0.065	0.089
Exhausted	0.319	0.291	0.656	0.641
Externally terminated	0.002	0.002	—	—
Terminated at 52 weeks	0.150	0.157	0.076	0.044
Managerial	0.177	0.183	0.107	0.100
Clerical	0.033	0.035	0.007	0.015
Sales	0.008	0.008	0.003	0.004
Services	0.189	0.188	0.200	0.178
Primary	0.402	0.388	0.575	0.585
Processing, Machine Operators	0.095	0.096	0.071	0.082
Transport	0.004	0.004	—	—
Material Handling	0.082	0.086	0.038	0.030
Not elsewhere classified	0.010	0.011	—	0.007
Agriculture	0.060	0.062	0.038	0.048
Mining	0.006	0.007	—	—
Manufacture	0.153	0.160	0.076	0.056
Construction	0.115	0.121	0.052	0.048
Transport	0.041	0.043	0.012	0.015
Communication	0.008	0.009	—	0.004
Wholesale	0.032	0.033	0.022	0.007
Retail	0.109	0.113	0.059	0.052
F.I.R.E.	0.094	0.099	0.040	0.022
Public Administration	0.149	0.116	0.515	0.615
Services	0.184	0.190	0.126	0.078
Missing	0.048	0.047	0.062	0.056
Observations	11,093	10,242	581	270
Sample percent	100	92	5	2

Table A.29
Summary Statistics on UI Claims in Prince Edward Island, 1991

Variable	Population	UI Only	Concurrent UI-Welfare	Subsequent UI-Welfare
Female	0.43	0.42	0.61	0.40
Age	36.121	36.235	33.695	34.500
Claim duration	40.695	40.337	48.333	45.650
Weeks paid	30.636	30.209	39.152	39.450
Weeks disqualified/disentitled	0.144	0.131	0.495	—
Benefit rate	252.223	255.982	175.267	184.300
Insured weeks	23.889	24.024	21.267	20.650
Insured earnings	6,662.698	6,759.013	4,730.086	4,716.650
Developmental uses	0.126	0.120	0.248	0.250
Training	0.058	0.057	0.095	—
Regular	0.883	0.878	0.971	1.000
Sickness	0.020	0.020	0.010	—
Fishing	0.077	0.081	—	—
Maternity/Parental	0.020	0.021	0.019	—
Not terminated	0.030	0.029	0.038	—
Lapsed	0.487	0.489	0.257	0.400
Exhausted	0.266	0.261	0.390	0.300
Externally terminated	0.003	0.003	—	—
Terminated at 52 weeks	0.214	0.209	0.314	0.300
Managerial	0.108	0.109	0.114	0.050
Clerical	0.104	0.105	0.086	0.100
Sales	0.034	0.034	0.038	—
Services	0.129	0.123	0.267	0.150
Primary	0.209	0.214	0.124	0.100
Processing, Machine Operators	0.249	0.251	0.200	0.250
Transport	0.053	0.054	0.029	0.150
Material Handling	0.017	0.017	0.010	0.050
Not elsewhere classified	0.096	0.094	0.133	0.150
Agricultural and Mining	0.172	0.176	0.086	0.150
Manufacture	0.176	0.178	0.152	0.100
Construction	0.118	0.120	0.057	0.150
Transport	0.031	0.031	0.029	0.050
Communication	0.002	0.002	0.010	—
Wholesale	0.058	0.059	0.038	—
Retail	0.057	0.056	0.086	0.050
F.I.R.E.	0.040	0.039	0.076	—
Public Administration	0.146	0.139	0.286	0.300
Services	0.183	0.184	0.152	0.150
Missing	0.017	0.016	0.029	0.050
Observations	2,636	2,511	105	20
Sample percent	100	95	4	1

Table A.30
Summary Statistics on UI Claims in Prince Edward Island, 1992

Variable	Population	UI Only	Concurrent UI-Welfare	Subsequent UI-Welfare
Female	0.42	0.43	0.48	0.24
Age	36.467	36.691	34.447	34.436
Claim duration	44.593	44.369	47.851	41.945
Weeks paid	30.118	29.610	34.380	35.909
Weeks disqualified/disentitled	0.139	0.125	0.337	—
Benefit rate	261.421	266.108	214.267	235.818
Insured weeks	22.578	22.913	21.303	12.982
Insured earnings	6,713.320	6,870.798	5,457.587	4,670.691
Developmental uses	0.143	0.136	0.236	0.091
Training	0.066	0.065	0.101	0.018
Regular	0.883	0.879	0.938	0.873
Sickness	0.023	0.022	0.038	—
Fishing	0.076	0.081	0.010	0.127
Maternity/Parental	0.017	0.018	0.014	—
Not terminated	0.369	0.369	0.413	0.182
Lapsed	0.276	0.288	0.168	0.127
Exhausted	0.230	0.215	0.284	0.673
Externally terminated	0.002	0.002	0.005	—
Terminated at 52 weeks	0.123	0.125	0.130	0.018
Managerial	0.180	0.188	0.120	0.055
Clerical	0.033	0.032	0.038	0.018
Sales	0.011	0.012	0.010	—
Services	0.162	0.155	0.250	0.127
Primary	0.252	0.250	0.279	0.236
Processing, Machine Operators	0.198	0.203	0.111	0.327
Transport	0.004	0.005	—	—
Material Handling	0.057	0.057	0.058	0.036
Not elsewhere classified	0.104	0.099	0.135	0.200
Agricultural and Mining	0.161	0.163	0.125	0.164
Manufacture	0.166	0.168	0.159	0.109
Construction	0.112	0.113	0.096	0.127
Transport	0.025	0.027	0.019	—
Communication	0.005	0.005	0.010	—
Wholesale	0.074	0.076	0.038	0.109
Retail	0.061	0.062	0.067	—
F.I.R.E.	0.045	0.047	0.024	0.018
Public Administration	0.146	0.132	0.250	0.345
Services	0.181	0.181	0.197	0.109
Missing	0.024	0.025	0.014	0.018
Observations	2,635	2,372	208	55
Sample percent	100	90	8	2

Table A.31
Summary Statistics on UI Claims in Alberta, 1991

Variable	Population	UI Only	Concurrent UI-Welfare	Subsequent UI-Welfare
Female	0.45	0.46	0.37	0.44
Age	34.207	34.511	31.852	31.713
Claim duration	35.579	34.693	43.674	37.367
Weeks paid	24.694	23.969	31.026	27.419
Weeks disqualified/disentitled	0.737	0.635	1.663	0.979
Benefit rate	267.472	272.849	228.322	212.023
Insured weeks	39.095	39.609	35.986	30.997
Insured earnings	8,881.765	9,064.783	7,558.332	6,953.578
Developmental uses	0.132	0.128	0.160	0.141
Training	0.073	0.069	0.107	0.091
Regular	0.898	0.891	0.959	0.944
Sickness	0.039	0.040	0.025	0.032
Maternity/Parental	0.062	0.068	0.016	0.023
Not terminated	0.031	0.030	0.049	0.021
Lapsed	0.480	0.516	0.262	0.320
Exhausted	0.303	0.281	0.473	0.490
Externally terminated	0.003	0.003	0.003	—
Terminated at 52 weeks	0.175	0.171	0.214	0.170
Managerial	0.186	0.197	0.099	0.094
Clerical	0.180	0.185	0.144	0.150
Sales	0.061	0.062	0.050	0.070
Services	0.122	0.115	0.181	0.185
Primary	0.100	0.098	0.126	0.076
Processing, Machine Operators	0.250	0.254	0.286	0.348
Transport	0.041	0.040	0.047	0.035
Material Handling	0.029	0.028	0.033	0.029
Not elsewhere classified	0.021	0.019	0.034	0.026
Agriculture	0.045	0.046	0.041	0.050
Mining	0.055	0.055	0.056	0.056
Manufacture	0.110	0.109	0.117	0.117
Construction	0.148	0.147	0.145	0.167
Transport	0.034	0.032	0.051	0.029
Communication	0.011	0.012	0.011	0.006
Wholesale	0.047	0.046	0.061	0.044
Retail	0.094	0.093	0.105	0.085
F.I.R.E.	0.100	0.102	0.083	0.079
Public Administration	0.095	0.089	0.043	0.085
Services	0.241	0.240	0.249	0.240
Missing	0.030	0.029	0.039	0.041
Observations	16,519	14,649	1,529	341
Sample percent	100	89	9	2

Table A.32
Summary Statistics on UI Claims in Alberta, 1992

Variable	Population	UI Only	Concurrent UI-Welfare	Subsequent UI-Welfare
Female	0.44	0.45	0.36	0.34
Age	34.862	35.300	31.934	31.906
Claim duration	44.526	44.106	47.771	44.497
Weeks paid	24.944	24.393	28.889	26.939
Weeks disqualified/disentitled	0.547	0.464	1.148	0.755
Benefit rate	278.847	285.864	233.012	225.152
Insured weeks	39.031	39.738	35.358	27.590
Insured earnings	9,219.518	9,465.608	7,634.629	7,192.510
Developmental uses	0.132	0.131	0.138	0.181
Training	0.082	0.081	0.090	0.094
Regular	0.894	0.888	0.934	0.932
Sickness	0.040	0.038	0.042	0.051
Maternity/Parental	0.067	0.074	0.025	0.016
Not terminated	0.429	0.431	0.428	0.381
Lapsed	0.228	0.243	0.122	0.148
Exhausted	0.206	0.189	0.314	0.342
Externally terminated	0.002	0.002	0.002	—
Terminated at 52 weeks	0.135	0.135	0.134	0.129
Managerial	0.292	0.308	0.180	0.171
Clerical	0.057	0.061	0.034	0.023
Sales	0.020	0.020	0.013	0.016
Services	0.202	0.192	0.261	0.277
Primary	0.310	0.303	0.357	0.365
Processing, Machine Operators	0.062	0.061	0.075	0.068
Transport	0.006	0.007	0.005	0.003
Material Handling	0.021	0.021	0.024	0.013
Not elsewhere classified	0.030	0.026	0.052	0.065
Agriculture	0.023	0.022	0.028	0.035
Mining	0.054	0.055	0.047	0.045
Manufacture	0.106	0.105	0.120	0.090
Construction	0.140	0.138	0.146	0.194
Transport	0.033	0.032	0.040	0.042
Communication	0.012	0.013	0.008	0.010
Wholesale	0.046	0.046	0.051	0.042
Retail	0.105	0.104	0.108	0.113
F.I.R.E.	0.103	0.106	0.081	0.077
Public Administration	0.076	0.080	0.050	0.058
Services	0.247	0.246	0.262	0.229
Missing	0.055	0.054	0.060	0.065
Observations	17,677	15,376	1,991	310
Sample percent	100	87	11	2

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List of UI Evaluation Technical Reports

Unemployment Insurance Evaluation

In the spring of 1993, a major evaluation of UI Regular Benefits was initiated. This evaluation consists of a number of separate studies, conducted by academics, departmental evaluators, and outside agencies such as Statistics Canada. Many of these studies are now completed and the department is in the process of preparing a comprehensive evaluation report.

Listed below are the full technical reports. Briefs of the full reports are also available separately. Copies can be obtained from:

Human Resources Development Canada
Enquiries Centre
140 Promenade du Portage
Phase IV, Level 0
Hull, Quebec K1A 0J9 Fax: (819) 953-7260

UI Impacts on Employer Behaviour

- **Unemployment Insurance, Temporary Layoffs and Recall Expectations**
  M. Corak, Business and Labour Market Analysis Division, Statistics Canada, 1995. *(Evaluation Brief #8)*

- **Firms, Industries, and Cross-Subsidies: Patterns in the Distribution of UI Benefits and Taxes**
  M. Corak and W. Pyper, Business and Labour Market Analysis Division, Statistics Canada, 1995. *(Evaluation Brief #16)*

- **Employer Responses to UI Experience Rating: Evidence from Canadian and American Establishments**
  G. Betcherman and N. Leckie, Ekos Research Associates, 1995. *(Evaluation Brief #21)*

UI Impacts on Worker Behaviour

- **Qualifying for Unemployment Insurance: An Empirical Analysis of Canada**
  D. Green and C. Riddell, Economics Department, University of British Columbia, 1995. *(Evaluation Brief #1)*

- **Unemployment Insurance and Employment Durations: Seasonal and Non-Seasonal Jobs**
  D. Green and T. Sargent, Economics Department, University of British Columbia, 1995. *(Evaluation Brief #19)*

- **Employment Patterns and Unemployment Insurance**
  L. Christofides and C. McKenna, Economics Department, University of Guelph, 1995. *(Evaluation Brief #7)*

- **State Dependence and Unemployment Insurance**
  T. Lemieux and B. MacLeod, Centre de Recherche et Développement en Economique, Université de Montréal, 1995. *(Evaluation Brief #4)*

- **Unemployment Insurance Regional Extended Benefits and Employment Duration**
  C. Riddell and D. Green, Economics Department, University of British Columbia, 1996. *(forthcoming)*

- **Seasonal Employment and the Repeat Use of Unemployment Insurance**
  L. Wesa, Insurance Programs Directorate, HRDC, 1995. *(Evaluation Brief #24)*

UI Macroeconomic Stabilization

- **The UI System as an Automatic Stabiliser in Canada**
  P. Dungan and S. Murphy, Policy and Economic Analysis Program, University of Toronto, 1995. *(Evaluation Brief #5)*

- **Canada's Unemployment Insurance Program as an Economic Stabiliser**
  E. Stokes, WEFA Canada, 1995. *(Evaluation Brief #6)*

UI and the Labour Market

- **Unemployment Insurance and Labour Market Transitions**
  S. Jones, Economics Department, McMaster University, 1995. *(Evaluation Brief #22)*

- **Unemployment Insurance and Job Search Productivity**
  P.-Y. Crémieux, P. Fortin, P. Storer and M. Van Audenrode, Département des Sciences économiques, Université du Québec à Montréal, 1995. *(Evaluation Brief #3)*

- **Effects of Benefit Rate Reduction and Changes in Entitlement (Bill C-113) on Unemployment, Job Search Behaviour and New Job Quality**
  S. Jones, Economics Department, McMaster University, 1995. *(Evaluation Brief #20)*

- **Jobs Excluded from the Unemployment Insurance System in Canada: An Empirical Investigation**
  Z. Lin, Insurance Programs Directorate, HRDC, 1995. *(Evaluation Brief #15)*

- **Effects of Bill C-113 on UI Take-up Rates**
  P. Kuhn, Economics Department, McMaster University, 1995. *(Evaluation Brief #17)*

- **Implications of Extending Unemployment Insurance Coverage to Self-Employment and Short Hours Work Week: A Micro-Simulation Approach**
  L. Osberg, S. Phipps and S. Erksoy, Economics Department, Dalhousie University, 1995. *(Evaluation Brief #25)*

- **The Impact of Unemployment Insurance on Wages, Search Intensity and the Probability of Re-employment**
  P.-Y. Crémieux, P. Fortin, P. Storer and M. Van Audenrode, Département des Sciences économiques, Université du Québec à Montréal, 1995. *(Evaluation Brief #27)*

UI and Social Assistance

- **The Interaction of Unemployment Insurance and Social Assistance**
  G. Barrett, D. Doiron, D. Green and C. Riddell, Economics Department, University of British Columbia, 1996. *(Evaluation Brief #18)*
- **Job Separations and the Passage to Unemployment and Welfare Benefits**
  G. Wong, Insurance Programs Directorate, HRDC, 1995. *(Evaluation Brief #9)*
- **Interprovincial Labour Mobility in Canada: The Role of Unemployment Insurance and Social Assistance**
  Z. Lin, Insurance Programs Directorate, HRDC, 1995. *(Evaluation Brief #26)*

UI, Income Distribution and Living Standards

- **The Distributional Implications of Unemployment Insurance: A Micro-Simulation Analysis**
  S. Erksoy, L. Osberg and S. Phipps, Economics Department, Dalhousie University, 1995. *(Evaluation Brief #2)*
- **Income and Living Standards During Unemployment**
  M. Browning, Economics Department, McMaster University, 1995. *(Evaluation Brief #14)*
- **Income Distributional Implications of Unemployment Insurance and Social Assistance in the 1990s: A Micro-Simulation Approach**
  L. Osberg and S. Phipps, Economics Department, Dalhousie University, 1995. *(Evaluation Brief #28)*
- **Studies of the Interaction of UI and Welfare using the COEP Dataset**
  M. Browning, P. Kuhn and S. Jones, Economics Department, McMaster University, 1995. *(no Evaluation Brief available)*

Final Report

- **Evaluation of Canada's Unemployment Insurance System: Final Report**
  G. Wong, Insurance Programs Directorate, HRDC, 1996. *(forthcoming)*